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THE ECONOMIC DEVELOPMENT OF RUSSIA

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1905-1914

WITH SPECIAL REFERENCE TO
TRADE, INDUSTRY, AND
FINANCE

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TO
J. M. MILLER

AUTHOR'S PREFACE

OF Russia it may truly be said that no country has inspired more profound or sustained interest, and no country has been less clearly understood by her neighbours. International understanding is never particularly easy of attainment. In the case of Russia, several factors combine to make especially difficult—the fundamental differences in historical and cultural development which divide her from Western Europe, the language barrier which comparatively few foreigners ever surmount, the geographical inaccessibility of many parts of her vast domains.

In consequence, Russia has always tended to loom somewhat mistily on the horizon of Western European thought, and to be presented to the popular imagination there under various grotesque disguises, the long-haired Anarchist of pre-war days giving place to the still more fearsome apparition of the fire-and-slaughter-breathing Bolshevik. Very little attention has been directed towards the careful study of the soil which nourished these exotic plants, in spite of the intense interest which they themselves aroused.

To present a study of Russia's pre-war economic development may seem a round-about method of satisfying the prevailing interest in modern Russia. It is, however, based on the conviction that the

story of Russia is a story of continuity, in the economic sphere at least ; however profound may have been the cleavage in her political development introduced by the events of 1917. With minor modifications consequent upon post-revolution changes in frontiers, land policy, and so on, the economic problems confronting the Soviet régime remain essentially the same as those which the Tsarist Government had to face. It is, therefore, only possible to view the present situation in proper perspective through a study of the immediate past in which it has its roots : one result should be to show that Bolshevism is at least an entirely comprehensible, although perhaps not inevitable, outcome of Russia's previous development.

The obvious omissions in the book, such as the absence of any reference to internal trade, or to the interesting development of the co-operative movement, the inadequate references to agriculture, must be ascribed simply to lack of time. Since so very little work has been done in this field, it is hoped that even an incomplete study may prove useful.

In the task of collecting material I have come under a debt of gratitude in many quarters. At the London School of Economics, I have to express my gratitude to Professor Lilian Knowles for her stimulating guidance of my work throughout, and to Professor A. J. Sargent for helpful criticism in its later stages. At the School of Slavonic Studies, London, I owe much to the sustained interest and encouragement of the Director, Sir Bernard Pares, and very much indeed to Baron A. Meyendorff, without whose guidance it would have been extremely difficult to handle the masses of material available in Russian sources.

For access afforded to valuable Russian material not available elsewhere, I have to thank Mr. A. M. Onou, previous Russian Consul-General in London, and also Sir M. de Rutkowski, who very generously placed his private library at my disposal : for useful material on the Finance side, I am indebted to the kindness of Mr. C. B. Crisp. The final shaping of the book owes much to the helpful criticism and advice of Professor J. S. Nicholson and Mr. A. S. Wade. For the preparation of maps I have to thank Miss D. Wilfork of the London School of Economics.

My thanks are due to the Carnegie United Kingdom Trust for their assistance towards the publication of this book.

M. S. MILLER.

LIVERPOOL,

December 1925.

INTRODUCTORY NOTE

THE widespread interest in modern Russia has been responsible for a flood of impressionist books and pamphlets, the majority of which do more honour to the imaginative powers of their authors than to their patience in unravelling the tangled skein of Russia's economic and political life. It is to be sincerely hoped that Dr. Miller's study of Russia's Economic Development during the decade preceding the war, based as it is on years of detailed research, will prove to be a welcome relief from this type of literature.

A possible disadvantage of her treatment from one point of view is that it is based on estimates and statistics, which, while tolerably correct, make little appeal to the retributive imagination of the impressionist school of writers, who tend rather to proclaim sweeping generalizations. The counterbalancing advantages are, however, a sufficient justification. Here we have presented to us, in very small space, a great variety of important subjects, with some solid foundation in the statistical appendices at the end of each section, together with a comprehensive and lucid exposition of the main currents and tendencies which underlie the economic facts. As a result, the serious student of Russian affairs should be guided into useful channels of study, and the gifted impressionist should be provided with a somewhat more secure foundation for his general statements.

A particularly interesting element in Dr. Miller's present contribution to the subject is afforded by the diversity of the sources upon which she has drawn—French, German, English, Italian, even American, as well as Russian—thus enabling the reader to view Russian development, not in isolation, but in its relationship to the concepts and understanding of Western Europe.

It is unfortunate that the pathway of academic research remains a method of approach to the Russian problem which comparatively few writers have the capacity for, or the opportunity of, utilizing. This book will serve a useful purpose if it emphasizes the necessity for preceding the formation of decisions and opinions, particularly in international affairs, by a painstaking and searching analysis of available facts.

(Signed) A. MEYENDORFF.

CONTENTS

PART I.

INTRODUCTION.

CHAP.		PAGE
I	GEOGRAPHICAL SURVEY	3
II	THE SOCIOLOGICAL BASIS OF ECONOMIC DEVELOPMENT AND THE CONSTITUTIONAL REFORM	15
	APPENDIX	29

PART II.

TRADE.

III	THE TRADE BALANCE AND TARIFF POLICY	39
IV	FOREIGN TRADE	55
	APPENDIX	66

PART III.

FINANCE.

V	BANKING	81
VI	CURRENCY AND THE NATIONAL DEBT	105
VII	THE STATE BUDGET	125
	APPENDIX	147

PART IV.

WAYS OF COMMUNICATION.

VIII	ROADS AND WATERWAYS: SHIPPING	173
IX	THE RAILWAY SYSTEM	182
	APPENDIX	202

PART V.

INDUSTRY.

CHAP.	(a) MANUFACTURING INDUSTRY.	PAGE
X	INDUSTRIAL DEVELOPMENT	219
XI	MANUFACTURES	241
	(b) EXTRACTIVE INDUSTRY.	
XII	MINING AND METALLURGY	257
XIII	FISHERIES AND FORESTRY	268
	APPENDIX	279
XIV	CONCLUSION	295
	BIBLIOGRAPHY	301
	INDEX	309

SYNOPSIS

PART I.

INTRODUCTION.

HAP.

I GEOGRAPHICAL SURVEY.

- | | | |
|-------|--|---|
| (i) | Foreword: predominant influence of the State in the economic structure of Russia: historical basis of this development | 3 |
| (ii) | Main divisions of Russia | 5 |
| | Climate: European Russia; Asiatic Russia. | |
| | The Soil: zones of vegetation; Blacksoil and non-black soil. | |
| (iii) | Population: actual numbers; racial composition; religions; distribution of the population; occupations . . . | 9 |

II THE SOCIOLOGICAL BASIS OF ECONOMIC DEVELOPMENT, AND THE CONSTITUTIONAL REFORM.

- | | | |
|-------|--|----|
| (i) | The influence of theory on economic development. Different strata of society in Russia | 15 |
| (ii) | Two periods in sociological thought: (1) from the Emancipation to the 90's, Utopian Agrarianism; (2) from the 90's to the Great War, Marxism and industrial socialism. | 17 |
| (iii) | Events leading up to the establishment of the Duma | 21 |
| (iv) | From the establishment of the Duma up to the outbreak of the Great War. | |
| | Change in the Electoral Law. Reasons for the apparent ineffectiveness of the Duma. Progress or reaction, 1905-14? | 24 |

APPENDIX	29
--------------------	----

PART II.

TRADE.

III THE TRADE BALANCE AND TARIFF POLICY.

- | | | |
|------|---|----|
| (i) | Controversial ideas: the "Eurasians" and the "self-supporting" theory; the real need for trade | 39 |
| (ii) | The Trade Balance: statistical weaknesses in its compilation; bases of valuation in the official trade returns, (a) official valuation duties, (b) declarations | 40 |
| | Views upon the maintenance of a favourable balance: its effect on (a) the agricultural population—limitation of necessary consumption; (b) the gold standard | 45 |

CHAP.		PAGE
(iii)	Tariff policy in the nineteenth century: 1800-24 prohibitive tariff; 1824-76 mitigation of prohibitive duties; 1876 onwards reinforcement of protective policy. Customs duties 1905-14: continuance of high rates	49
(iv)	Commercial Treaties: Treaty of 1894 with Germany: the 1904 Treaty	51
IV FOREIGN TRADE.		
(i)	Exports	55
(a)	Predominance of grain.	56
(b)	Russia's wheat surplus: where produced; conditions under which produced. System of land tenure. Defects of agricultural methods.	57
(c)	Organization of the wheat trade: middlemen; the peasant seller; the private seller.	57
(d)	Elevators: insufficient numbers and resulting disadvantages.	58
(e)	Export by frontier.	59
(f)	Exports other than grain: dairy produce; other agricultural exports; timber; iron products; manufactures.	59
(ii)	Imports	61
(a)	Proportionate increase in the years preceding the War.	61
(b)	Various classes of imports; manufactured goods; foodstuffs excluding cereals; animal produce.	62
(c)	Countries participating in trade with Russia: the relative positions of Britain and Germany.	64
APPENDIX	. . . . .	66

PART III.

FINANCE.

V BANKING.

(i)	General review of banking and credit institutions: State Credit Institutions; Social Credit Institutions; Private Banks	81
(ii)	State Credit Institutions.	
(a)	The State Bank: statutory functions; the Bank essentially a State Institution; increase in the activities of the Bank; relations between the State Bank and the Treasury; tendencies of development as shown by the operations of the Bank; the security of the note issue; assistance to agriculture; criticisms of the Bank	82
(b)	The State Savings Banks: functions of the Savings Banks, (1) collection of deposits, (2) Life Insurance operations; the urban nature of the movement; increasing significance of the small depositor; formation of a lower middle class; the Savings Banks and the organization of small credit; social changes reflected in the operations of the Savings Banks and of the Petty Credit Institutions, (1) the transition of the peasantry from the communal to the individual system of landholding; (2) the growth of co-operative institutions	88

SYNOPSIS

XV

CHAP.

PAGE

(c)	The Land Banks.	
	The Nobles' Land Bank: conditions preceding its foundations; its functions; the Bank and general State policy; criticisms of the Bank; social change reflected in its operations; impoverishment of the landed gentry	94
	The Peasants' Land Bank: statutory functions; activities; social change reflected in its operations; the liquidation of the village commune; criticisms of the Peasants' Bank; its activities as connected with the "land-hunger" problem	98
(iii)	Social Credit Institutions.	
	Municipal Banks: management and control; functions	101
(iv)	Private Credit Institutions.	
	Joint Stock Commercial Banks: statutory limitations and functions; their relations with industrial development	102

VI CURRENCY AND THE NATIONAL DEBT.

(i)	The Monetary Reform: events leading up to the adoption of the gold standard of currency; aims of the Reform, and difficulties in carrying it through; legal establishment of the gold standard.	105
(ii)	The State Bank and the Monetary Reform: issue of credit notes; gold reserve of the State Bank	109
(iii)	Criticisms of the Reform: need for attracting gold and the resulting unfavourable effect upon the national economy; conclusions as to the real effect of the Monetary Reform.	110
(iv)	Effect of the Russo-Japanese War on the currency system.	112
(v)	Elements in the monetary circulation 1904-14: increasing use of paper money	113
(vi)	Origin and development of the National Debt: various factors in its growth, particularly the recurrence of foreign wars; the situation before the War	114
(vii)	Influence of the Russo-Japanese War	118
(viii)	The Composition of the Debt	119
(ix)	The significance of foreign investment in Russia; various opinions as to its extent; tendency to increasing reliance on home resources	121
(x)	Markets in which Russia borrowed.	122

VII THE STATE BUDGET.

(i)	Revenue.	
	Direct taxes; Indirect taxes; Royalties; Property and Funds belonging to the State	125
(ii)	Expenditure.	
	General totals of ordinary and extraordinary expenditure, 1900-13; special note on extraordinary expenditure, 1903-13	130
(iii)	The Free Balance of the Treasury.	
	Nature and origin; actual amounts 1901-11; how the free balance was expended; justifications and advantages of the policy of maintaining a free balance; dangers of the policy	132
(iv)	The Burden of the taxation system: lack of elasticity; predominance of indirect taxation; projected reforms	136

CHAP.	PAGE
(v) Financial difficulties of the period 1905-14, (1) the Russo-Japanese War and the 1905 Revolution; (2) Cancellation of the Land Redemption Annuities	138
(vi) Local Administration. The Zemstvo: constitution and functions; relations with the Central Government; political development 1905-14; tendency to increasing central control. Local expenditure in 1912 and 1913; Zemstvo expenditure in its various categories; increase in local rates	139
(vii) Municipal Finance. Increase of municipal revenue; municipal activities; the home and foreign	144
APPENDIX	147

PART IV.

WAYS OF COMMUNICATION.

VIII ROADS AND WATERWAYS: SHIPPING.

(i) Roads: difficulties and importance of the problem of road-building in Russia; results of the old and new systems of control	173
(ii) Rivers: extent and importance in European and Asiatic Russia: defects of the river system	175
(iii) Canals: two groups of fluvial basins, (1) the north-east, and (2) the west; the Riga-Kherson canal	177
(iv) Shipping: insufficiency of the Mercantile Marine; Ship-building, reliance on foreign supplies; the Mercantile Marine in 1914; types of vessels, etc.	179

IX THE RAILWAY SYSTEM.

(i) Geographical aspect	182
(ii) Development up to 1905; methods of control; the Trans-Siberian Railway: motives and result, facts of construction	183
(iii) Development from 1905-14: increase of traffic: the unification of the tariffs; home industry and railway construction	187
(iv) State management and the finance of railway construction: two main periods, before 1908 and after that year.	192
(v) The position of Russia as compared with other countries.	200
APPENDIX	202

PART V.

INDUSTRY.

(a) Manufacturing Industry.

X INDUSTRIAL DEVELOPMENT.

(i) The development of factories, "proprietary," "votchinal" and "peasant"	220
(ii) The localization of industry	222
(iii) The personnel of industry: the employing classes, presence of a large foreign element; the employed; characteristics of the Russian worker; "kustar" industry, and the con-	

CHAP.		PAGE
	trovery between Populists and Marxists regarding it ; the status of the worker ; industrial legislation ; hiring of labour, relations between employers and employed ; factory inspectors ; Workmen's Compensation ; Health Insurance ; Accident Insurance ; the labour movement, trade unionism	223
	Combinations : legislation concerning them ; attitude of the Government towards them	237
XI	MANUFACTURES.	
	(i) General survey ; groups of manufactures, textiles, metal- working, food products, miscellaneous	241
	(ii) Sugar. The Government and the sugar industry ; geographical dis- tribution of the industry ; comparison with other coun- tries : export trade in sugar	242
	(iii) Spirits. Historical survey of various systems of control : the State Monopoly, organization, results from the (1) fiscal, (2) industrial, (3) social-hygienic, and (4) moral, points of view.	245
	(iv) Cotton. Historical aspect ; factors in the development of the industry ; main cotton manufacturing districts ; sources of raw material—transition to home supplies ; the trade in cotton goods, imports and exports	249
	(v) Iron. Centres of the industry ; factors in its development	254
	(b) Extractive Industry.	
XII	MINING AND METALLURGY.	
	(i) General survey of the mineral wealth of Russia in Europe and in Asia	257
	(ii) Coal and iron deposits : European and Asiatic fields.	258
	(iii) Petroleum. The international situation before the War ; Petroleum in Russia ; geographical distributions of the oil-fields, principal and secondary regions ; periods in the develop- ment of the industry ; the rôle of foreign capital ; export of Russian oil, position of the world market	261
XIII	FISHERIES AND FORESTRY.	
	(i) Fisheries. Fishing grounds in European and Asiatic Russia ; varieties of fish caught, and fish products ; Russia's position in the world trade ; the organization of the fishing trade ; methods of preservation and of transport—the refrigerat- ing industry	268
	(ii) Forestry. Distribution of forest areas ; varieties of trees found ; Forest administration ; control over private owned forests ; administration of State-owned areas ; the export trade in timber, relative positions of Britain and Germany as importers of Russian timber	273
	APPENDIX	279
XIV	CONCLUSION	295
	BIBLIOGRAPHY	301
	INDEX	309

RUSSIAN AND BRITISH WEIGHTS AND MEASURES.¹

COMMERCIAL WEIGHTS.

1 Berkovets	3·224 Cwt.
1 Pud (Pood)	36·112 Lbs. (Avoir.)
1 Funt (Pound)	0·902 „ „
1 Lot	7·222 Drachms
1 Solotnik	2·407 „
1 Dolia	0·025 „

MEASURES OF LENGTH.

1 Verst	0·663 Mile
1 Sazhen	2·333 Yards = 7 Feet
1 Arshin	28 Inches
1 Fut	1 Foot
1 Inch (Duim)	1 Inch
1 Vershok	1·75 Inch

SQUARE MEASURES.

1 Square Verst	0·439 Square Mile
1 „ Sazhen	5·444 „ Yards
1 „ Arshin	0·605 „ „
1 „ Vershok	3·063 „ Inches
1 Dessiatine	2·700 Acres

WET MEASURES.

1 Bochka	108·279 Imperial Gallons
1 Vedro	2·707 „ „

DRY MEASURES.

1 Chetvert	5·775 Imperial Bushels
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CONVERSION OF VALUES.

At the Normal Rate of Exchange.

1 Rouble	2s.
9 Roubles 45 kopeks	

¹ *Vide* "Comparative Table of British, Russian and Metric Weights and Measures." Issued by the Editorial Department of the Russo-British Chamber of Commerce in London, 1917. Only those measures are given which are used in this book.

Part. I.
INTRODUCTION.

CHAPTER I. GEOGRAPHICAL SURVEY.

FOREWORD.

It may safely be postulated that no State has ever been fortunate enough to attain to a complete synthesis between the interests and ideals of the ruling class, and those of the people as a whole. In Russia, however, the gulf between these two was particularly wide, the resulting conflict particularly severe, and fraught with especial dangers. The explanation of this has to be sought in the broad facts of her history. Russian civilization first emerged round the towns of Novgorod and Kiev, where it flourished from the ninth century to the end of the thirteenth. Driven northwards by the Tartar invasion, it reappeared in the region round about Moscow, where it continued to develop until a new centre was found at Petrograd at the end of the seventeenth century. There it remained until the outbreak of the Revolution in 1917.

It was during the period of Moscow domination that the exigencies of the long and bitter struggle against barbarian rule brought into being the two characteristic features of Russian political and social life—autocracy and serfdom. It was the concentration of power afforded by the autocratic form of government, and the concentration of effort rendered possible by the institution of serfdom, that finally enabled the Russian State to throw off the Tartar yoke, and to become once more an independent entity.¹ By the time that this task had been accomplished the gulf had been

¹ Eck, Alexandre, *L'aspect synthétique de l'histoire de la Russie*, p. 306. Reprint from the *Revue Belge de Philologie et d'Histoire*, Vol. III, No. 2, April-June, 1924. Brussels, 1924.

4 THE ECONOMIC DEVELOPMENT OF RUSSIA

set between the active ruling minority, and the vast apathetic mass of the ruled.

We find, therefore, that Russia, in all her tremendous achievements, has been controlled by a tiny minority, whose power had no real roots in the conscious consent of the masses of the people. It was State policy that dominated foreign trade, fostered industrial development, dictated the general financial policy of the country, laid its hand upon the system of transport. The State was an active and determining factor in economic activity, to an extent unparalleled in any other European country. Imbued with the advanced ideas of Western Europe, the ruling minority entered upon schemes which make one marvel at their magnitude and daring. Serfdom was abolished with one stroke of the pen, and with a magnificent disregard for the practical difficulties following upon its removal: the colossal task was undertaken of transforming backward, agricultural Russia into a self-sufficing and industrialized modern State; the dream of a mighty Empire in the East was conceived, and slowly carried into reality. But the power of conception on the part of the rulers far outstripped the practical limits of execution. They found themselves limited by the sheer physical difficulties of unification and co-ordinated action in a widespread Empire with very deficient means of communication; they were hindered in the task of government by the complexities of varying nationalities and differing stages of culture; they were baffled in their heroic ideals of progress by the stolid inertia of the dumb masses of the peasantry. It was in the last decade of the nineteenth century that the elements of discord thus generated became increasingly apparent, when Russia was definitely entering upon the process of transition from a purely agricultural to an industrialized State. And the clash between old and new continued to be acute during the years of the twentieth century preceding the war, in spite of the appearance of certain reconciling factors.

In the present work the twofold aim will be kept in view of (1) presenting as accurate a picture as possible of the actual facts of Russia's economic development during the

decade preceding the Great War; (2) tracing the predominant influence of State action in the various spheres of economic activity, and seeing to what extent development within these spheres was influenced by the conflict which we have noted between Government action on the one hand and fundamental social development on the other. Since it would not be possible to consider so complex a matter as a whole, the most practicable method has seemed to be to consider each phase of economic activity separately under the various headings of Trade, Finance, Ways of Communication and Industry.

GEOGRAPHICAL SURVEY.

In considering the previous Russian Empire from the geographical point of view, one is first of all impressed by its immensity. Nature seems to have planned everything on a giant scale, in the vast plains seemingly endless in their extent, rivers unequalled in length, mountains of enormous altitude. European Russia alone was sixteen times larger than Great Britain.¹ But within this immensity there was unity. The whole vast extent of the Russian Empire could be divided into two main sections, the part controlled by Atlantic influence, and the part controlled by the Pacific. Practically the whole of European Russia, and by far the greater part of Asiatic Russia, belonged to the former. Only the Far East came under the influence of the Pacific, and it has to be considered as geographically quite distinct from the rest of Russia. It was colonized, mainly from the sea, via the Suez Canal, and round the south of India, and only to a lesser extent overland, via Siberia. Until the construction of the Trans-Siberian Railway at the beginning of the present century it was much more accessible by the former route than overland. As a geographical unit, therefore, Russia must be considered as Atlantic Russia, Russia turned towards the West.²

¹ *The Industries of Russia*, arranged for the World's Columbian Exhibition at Chicago. Petrograd, 1893. J. M. Crawford, editor of English translation. Vol. III, Introduction, p. xvii *et seq.*

² Lecture on the "Geography of Russia," delivered by Prince Mirsky, at the London School of Economics, June, 1924.

6 THE ECONOMIC DEVELOPMENT OF RUSSIA

Russia's climate is continental, with long cold winters, and short, but hot, summers. Rainfall also occurs in the summer, except in the southern regions of the Crimea and the Caucasus, where the Mediterranean type of climate prevails, and the summers are dry. This continental climate is one of Russia's greatest geographical assets, since the heat of summer, and its accompanying moisture, render agriculture possible over wide areas, even although the cultural season is very short. Thus agriculture is possible up to Yakutsk, although the mean annual temperature of that region is zero (F.).

Russia is singularly deficient in natural factors which might tend to modify the extremes of her climate. The Scandinavian peninsula, for example, effectively shuts off the moderating influence of the Gulf Stream, so that there is nothing to abate the rigours of the northern winters.¹ There are no mountains in the north to protect the rest of the country from the icy winds blowing in from the frozen seas which bound the whole northern coast of the Empire ; and, on the other hand, the lofty mountains along the southern frontier form an impassable barrier to the warm winds from the tropical regions.² The Urals are too low to form a protection against the dry winds which sweep in from the deserts of Central Asia. Hence there is nothing which might tend to moderate the extreme cold of the winters or the heat of the summers, and a difference of 83° has been observed between the mean temperatures of the hottest and coldest months in different parts of the country.

The immense plain making up European Russia is interrupted only by the low range of the Urals in the east, the Central Russian elevation, including the Valdai Hills, the Volga elevation, and the lofty range of the Caucasus mountains in the south. There was therefore no strongly marked contrast between mountain and plain in the country, but the dominant line of division was between forest and

¹ *Russian Cereal Crops. Area and Production by Governments and Provinces.* U.S. Department of Agriculture. Bureau of Statistics. Bulletin 84. By Mr. E. T. Peters. Washington, 1911, p. 17.

² Leroy-Beaulieu, Anatole, *La Russie des Tsars et les Russes* " 4th ed. Paris 1897.

steppe. This contrast has affected the whole history of Russia. While the open steppes were occupied by the nomadic hordes which had poured in from Central Asia, Russian culture could not venture to leave the shelter of the forest lands further north. From this follows the essentially colonial character of Russia's later development. Her expansion began from the forest area round about Moscow, and only gradually extended southwards, as the nomads who had previously controlled the steppe-lands were driven back. The southern half of Russia is therefore truly a colonial land, historically younger than North America, with a past of little more than three centuries.

The necessity of finding an outlet to the sea was the next driving factor in Russian history. By successive conquests and colonizing efforts the Baltic Sea on the north, and the Black Sea on the south, were finally reached. Later began the expansion eastwards, which culminated in the colonizing of the whole of Siberia, and the reaching of the Pacific. An ice-free outlet in the extreme north was found in the construction of the port of Ekaterin Harbour on the Murman Coast, but the problem of connecting it by good rail communications with the interior was only seriously undertaken after the outbreak of the late war.¹

Climatically, Asiatic Russia repeats the conditions found in European Russia, except that they are intensified, the extremes of temperature being even greater. In configuration it is more complicated than European Russia. Immense plateaux, reaching in parts to very considerable altitudes, cover the whole south and east of the country. The north and west are made up of an enormous plain.

European Russia is not broken up by mountains and navigable seas into strongly contrasting and sharply differentiated regions, as is Western Europe. Differences are found rather in the variations occurring in the vegetation of the different regions as one moves from north to south, due to differences of climate and latitude. (1) In the extreme north is the desolate region of the polar tundras, dreary stretches

¹ *The Times Russian Supplement*, April 26, 1915, p. 8, "Russia's access to the sea." With a map.

8 THE ECONOMIC DEVELOPMENT OF RUSSIA

of brownish-coloured plains, which only nourish a scanty vegetation of mosses and lichens. On this the reindeer is nourished, and the sparse population is enabled to eke out a livelihood by hunting and fishing. No agriculture is possible. (2) Further south, we pass into the kindlier region of the forests. A considerably denser population finds occupation in lumbering and working in wood, whilst agriculture and cattle-raising can also be carried on in the cleared areas. (3) The forests gradually become thinner, and finally merge into the treeless steppe region, where three distinct types of soil are to be observed. In the northern part, which shares to some extent the humidity of the lakes and forest region, is found the fertile stretch of black soil, which is the main seat of Russian agriculture, and supports a comparatively dense population. Further south the rainfall becomes more scanty, and the real steppes appear, undulating plains with a luxurious herbaceous vegetation. Agriculture is still possible, and is practised on the extensive system of cultivation. Finally, there is the desert region of the Aralo-Caspian depression, which was in former times completely covered by the sea. Hence the soil is not only sandy, but is strongly impregnated with salt, and is completely unfit for cultivation. The region is inhabited by the pastoral tribes of Asia, the Kalmyks and Khirgiz, who still lead a nomadic life. (4) Quite a different type of climate and vegetation is presented in the extreme south of Russia, in the Caucasus and the Crimea. Both sides of the Caucasian range are clothed with forests; the "Mediterranean" type of climate which prevails permits the growth of the olive, the vine and other fruits, while even such tropical products as rice and cotton can be grown under irrigation.

Asiatic Russia presents the same zones of tundra, forest, and arable plain, but the extent of the latter is considerably less than is the case in European Russia, and the virgin forest or "taiga" is greater in extent, marshier, and more difficult of access.

The essential distinction in soil, however, from the agricultural point of view, is that between the two main

regions of black soil and non-black soil or forest region. The latter is found roughly to the north of a line drawn through Kiev-Tula-Kazan, and the former to the south of that line. The forest region did not grow sufficient wheat to support itself, and was therefore dependent on supplies from the south. The black-soil division had to grow enough wheat to support its own population, supply the deficiencies of the northern region, and also provide wheat for export. It was deficient in timber, for supplies of which it was dependent on the north. Russia was thus divided into two mutually interdependent and complementary regions.¹ The black soil, or "chernoziom," stretched in a long band right across the whole width of Russia, and reappeared on the far side of the Urals in Siberia, in the south of the government of Tobolsk. It consisted of a layer of black mould of exceptional fertility, varying from a few inches to three or four feet in thickness, and its formation was attributed to the slow decomposition of the steppe grasses.

The change in the centre of cultivation within this black soil area was a much-discussed phenomenon in Russian agriculture from the '90's of last century onwards. It consisted in the gradual transference of the main seat of wheat cultivation from the central to the south and south-east provinces of Russia.²

POPULATION.

Russia stood easily first among the nations of Europe, both as regards the number of her population and the rate at which it increased. The annual increase of population between 1897 and 1912 was estimated at 2½ million, in spite of the influence of war, cholera and famine.³ The total at 1 January, 1913, was 170,902,900 for the Russian Empire, and 3,196,700 for Finland. Russia's death-rate,

¹ Appendix A, Statistics as to the quantity of cereals produced in the black soil and non-black soil regions respectively.

² Rubinow, I.M., *Russia's Wheat Surplus*, U.S. Department of Agriculture. Bureau of Statistics. Bulletin No. 42, p. 22, "Shifting of the wheat area." *Vide* Section 2, "Foreign Trade," p. 55.

³ *Russian Year Book*, 1915, ed. by N. Peacock.

however, was considerably higher than that of her sister nations in Europe, partly owing to the insufficiency of medical assistance, particularly among the peasant masses. Infant mortality was especially high.¹

In the matter of population the enormous extent of Russia offers the same bewildering variety of type as it does in climate and vegetation. But the apparent chaos of the latter was seen to resolve itself finally into two broadly distinct regions; the same principle of unity in the midst of apparent diversity is seen to be at work when we analyse the different races into their component parts.

It has been estimated that the inhabitants of the previous Russian Empire belonged to no fewer than 110 different nationalities, speaking fifty-three languages, apart from various minor tongues. But this apparent confusion is greatly lessened when it is realized that these nationalities can be grouped into a few main divisions. The following distribution according to language (on opposite page) will make this clear.²

The Indo-European group clearly predominated, and within it, the Slavonic peoples were the most important. Three groups of Russians have to be distinguished. The Great Russians were found mostly in the west and centre, round Moscow and Petrograd. The Little Russians congregated mostly along the southern extremities of the country, and were particularly dense round Kharkov and Poltava. The White Russians, the most purely Slavonic of the three groups, and at the same time the least numerous, were found more towards Poland and the Baltic States, round Minsk and Mogilev. The Poles extended westwards of a line drawn between Petrograd and Odessa, and also formed small colonies in the Caucasus, Siberia and Central Asia. Of the numerically less important nations in the Indo-European group, the following may be mentioned: the Bulgarians, Moldavians, and Rumanians in Bessarabia;

¹ Appendices B and C, statistics on (1) total population, comparison with other countries, and (2) mortality rates, comparison with other countries.

² Brockhaus, *Encyclopædic Dictionary*, Supplementary Volume, No. 4 (R.), p. 935 *et seq.*

Main Division.	Minor Groups.	No. of separate Languages.	Percentage of Population in 1897.
1. <i>Indo-European</i>	Slavonic Letto-Lithuanian Latin Germanic Aryan Armenian and others	19 and others	80.6
2. <i>Semitic</i>	Semitic	Jewish, and very small percentage of other Semitic languages	4.0
3. <i>Ural-Altaic</i>	Finnish (including Esthonians) Turko-Tartars Mongols and others	26 and others	13.7
4. Groups isolated by language	Hill tribes of the Caucasus Northern tribes of Siberia Tribes of the Far East, Polynesians, etc.	8 and others	1.6

the Letto-Lithuanians in the Baltic provinces; the German colonists in the latter provinces, also in the Volga regions and in the south; Armenians, mostly in the Caucasus and in the south; Greeks on the coasts of the Black Sea.

The Semitic group consisted of the Jews themselves, who were confined to certain western parts of the Empire, and other Semitic tribes, for example, the Chaldeans.

The most important members of the Ural-Altaic group were the Finns, who were most numerous in Finland, and extended also over the north and east of European Russia, round Petrograd and in the Baltic States. The Finns of the Volga region had become largely Russianized. The Turko-Tartars were found in the south and the south-east, and extended all through the middle and lower Volga regions. The Bashkirs and Khirgiz tribes were the most

12 THE ECONOMIC DEVELOPMENT OF RUSSIA

important of the latter group. The Kalmyk tribe were Mongols, and the Samoyeds of the far North also belong to this group.

Among the isolated groups may be mentioned the Caucasian peoples, the Georgians, and the Chinese, Koreans and Japanese in the Far Eastern possessions.

The numerical superiority of the Slavonic peoples, who formed 65.5 per cent. of the population of the Empire,¹ was therefore the unifying link in the apparent chaos of races. It had been the expansion of these peoples, by successive waves of colonization and conquest, from their central state round Moscow to the shores of the Black and Baltic Seas, and finally to the Pacific Ocean, that had built up the Russian Empire as it existed before the Great War.² Russia was still in the process of formation, not by the foundation of overseas colonies, but by expansion within an area which was constantly connected territorially with the centre from which it expanded. Russia had, therefore, at one and the same time, to face the problems of an old-established European monarchy, and those of a young country still in the stage of colonial expansion. The comparatively recent date of the foundation of some of her principal cities comes as a surprise to anyone who has not realized this fundamental fact of Russia's development. Petrograd, for example, was deliberately and artificially created in 1703; Saratov, the chief commercial centre of the lower Volga, acquired a position of economic importance as late as the second half of the nineteenth century; Odessa, the important port on the Black Sea, is younger than New York. It was only after the Napoleonic Wars that Russia's expansion eastwards was begun, and her economic conquest of Siberia was not consolidated until the completion of the Trans-Siberian railway at the end of the nineteenth century.

The religions professed by the various peoples making up

¹ Appendix D, groups within the Empire as percentages of total population.

² Williams, Harold, "The Nationalities of Russia" in *Russian Realities and Problems*, ed. J. D. Duff, Cambridge 1917. Also "Past and Present of Russian Economics" in the same edition, by Peter Struve.

the Empire followed the main lines of the racial divisions. The great majority of the Slavonic peoples belonged to the Greek Orthodox Church, a very small percentage was Roman Catholic, or adhered to the "Old Faith." The greater part of the Polish section of the population were Roman Catholics. Lutherans were found among the Letto-Lithuanians and the Finns. The Semitic group professed the Jewish faith, while Mohammedanism was predominant among the Caucasian tribes and the Turko-Tartars. Even Buddhism had its adherents among the Mongols.¹

Population was by no means equally distributed throughout the Empire. The Asiatic possessions were as yet very sparsely inhabited, 83 per cent. of the whole population being found in European Russia. Migration was gradually being facilitated as the economic development of Siberia progressed. Within European Russia itself the fertility of the soil was the determining factor influencing the density of population. The black earth region, the arable steppes, the industrial districts round Moscow and in Poland, were the most densely populated. Population was much thinner in the barren stretches of the north, and in the unexplored regions in the Far East. In comparison with her surface area, Russia was much less thickly populated than the other countries of Western Europe.²

There was naturally considerable variety in the method of working Russia's natural resources, corresponding to the enormous extent of her territory and the variety of races which inhabited it. There were still a large number of nomadic tribes, such as the Kalmyks and the Khirgiz, whose sole wealth consisted in their herds and flocks; many others, for instance the inhabitants of the Far North, lived by hunting and trapping; while an increasing percentage was occupied in industry and commerce. But by far the most important occupation was that of agriculture; 86·8 per cent. of the population still lived in rural districts

¹ Appendix E, statistics on the comparative importance of the various religions.

² Appendices F. and G. Russia's population per square verst as compared with other countries, and her density of population in the different districts within her own borders.

14 THE ECONOMIC DEVELOPMENT OF RUSSIA

before the war and 74.6 per cent. of these were engaged in purely agricultural pursuits.¹

This wide divergence of cultural types and standards of civilizations presented a problem unique among the problems of modern statesmanship, and modern economic policy. Methods of government and of administration had to be evolved which would prove suitable at one and the same time, for the primitive nomadic tribes of the extreme north and the south-east, and for the inhabitants of the Polish and Baltic towns, whose culture was at an advanced stage, and had developed largely under Western influences. This task had to be accomplished within a unified territorial area, and not in different units of territory widely separated from each other, as are the different sections of the British Empire. Some idea of the difficulties involved may be gathered by imagining the highly industrialized, urban population of the British Isles transported into the midst of agricultural India. The divergences would be no wider than those found in the Russian Empire as it existed before the recent war.

¹ Appendices H, and I. Distribution of the population among the different occupations, and comparative figures as to urban and rural population.

CHAPTER II.

THE SOCIOLOGICAL BASIS OF ECONOMIC DEVELOPMENT, AND THE CONSTITUTIONAL REFORM.

No student of economic developments in Russia could fail to be impressed by the profound influence exercised over these developments by theories and ideas concerning them. The explanation is to be sought in the peculiar conditions and characteristics of the Russian people. Although richly endowed mentally, they have not, as a whole, the practical sense which distinguishes in a greater or lesser degree the other nations of Western Europe. The typical Slav is a dreamer rather than a man of action, hence his tendency to indulge in lengthy discussions of some abstract subject, in preference to wrestling with any practical problem. Since the autocratic form of government cut off the majority of the thinking classes from any active participation in administrative affairs, they were driven to take refuge in theory, and find compensation in mental activity in that sphere for their impotence in the realm of politics and public affairs. The fact that the Government was very jealous of any infringement of its power, and that theories of social reform which met with its disapproval were liable to be mercilessly repressed, merely served to accentuate the fervour with which these ideas were upheld by their devotees. Tendencies to mysticism and to extreme views have also been noted by competent observers as typical characteristics of the Slav. Consequently the element of persecution served in many cases to exalt political theories to the level of religious faith, and to convert their followers into fanatics, whom no threat of punishment could deter

from following what they conceived to be the path of duty. It even converted assassination into an act of social justice or necessity. The practical outcome of this devotion to theory has been of immense significance, not only to Russia, but to the rest of the world as well. Only a country where such an attitude existed could have become the scene of the daring social experiment initiated in 1917.

Before considering the various social theories developed in Russia, from the Emancipation of the serfs in 1861 up to the Great War, it is necessary to have some idea of the composition and development of the different classes in the country upon whom these theories reacted. (1) The Emancipation of the serfs proved financially ruinous to many of the gentry or previous landowning class. In spite of Government assistance, especially in the shape of credits,¹ their decline as a class was slow but continuous. The lands which had remained with them gradually passed into the possession of the peasantry. There did not, therefore, grow up in Russia an influential class of propertied agrarians, such as existed in England. (2) The peasantry became free after 1861, and each adult male was granted a certain amount of land in his own right. This class was, however, also undergoing profound modifications, and was becoming slowly differentiated into a peasant "bourgeois" class, and the poorer landless peasants corresponding to the industrial proletariat of Western Europe.² (3) The development of Industry, largely stimulated by the release of labour supplies consequent upon the Emancipation, gave rise to a third class, composed of that section of the population which found employment in commerce, trade and industry. In its lower strata this class was closely connected with the

¹ Activities of the Nobles' Bank. *Vide* Section 3, Banking.

² The changes were partly due to economic factors leading to the emergence of different classes among the peasant masses, and also to the agrarian policy initiated by P. Stolypin, and put into action while the third Duma was in session, which aimed at replacing the communal by the individual system of landholding. Up to 1 July, 1910, 1,959,289 heads of households in the forty governments of European Russia had applied to become individual owners (i.e. 21.4 per cent. of the total number of heads of households). Of these, 1,349,460, or 14.7 per cent., had actually acquired their allotments. (No. 5,030 Consular Reports. Report on the 1912 Budget.)

peasant masses, which formed the reservoir from which the workers themselves were largely drawn. In its upper sections it was influenced by the Government policy of fostering industry by means of foreign capital, and a large section of its entrepreneur and manager class was composed of foreigners. (4) In addition to these classes there remained the bureaucracy, as the numerous "Chinovniks" or Civil Servants were called. Although so closely welded together by a uniform system and rigid discipline as to form a single entity devoted to the interests of the Government, this class had, nevertheless, connections with every other section of society. Thus a "Chinovnik" might well have a brother who was a confirmed Social Revolutionary, or a sister whose views inclined to Marxism, and his private sympathies—as distinct from his official views—might be swayed in various directions. (5) Finally, the "intelligentsia," or educated class, also formed a separate section, somewhat difficult to describe and define accurately. It is not sufficient to describe them as simply the educated or literary class.¹ Their distinguishing feature was a passion for social reform, a rooted objection to the existing social order, and a determination to replace it by something better.

Two periods are to be distinguished in the development of sociological thought. The first, which may be termed the period of Utopian agrarianism, occupied the period between the Emancipation of the serfs and the '90's of last century.

As late as the latter date the question as to whether the development of Capitalism in Russia was possible or desirable was still hotly debated. The most determined opponents of Capitalism were found in the Populist or Narodnik school of economists, the intellectual descendants of the Slavophiles of the pre-emancipation period.² The latter were the

¹ Williams, H. W., *Russia of the Russians*, London, 1914. Chap. IV, "The Intelligentsia."

² Hecker, J. F., *Russian Sociology*, New York 1915, Chap. I. Ischchanian, Dr. B., *Die ausländischen Elemente in der russischen Volkswirtschaft*, Berlin, 1913, Chap. II, "General views on the capitalistic development of Russia." See also Bagucharsky, v., *History of Active Populism*, 1905 (R).

product of the outburst of nationalism following the triumph over Napoleon. Their main aim was to ensure the development of Russian civilization on exclusively Russian lines, in opposition to the "Western" school of thought which sought to enrich Russian culture by the incorporation in it of what was good in the achievements of Western Europe. The Narodniks followed the Slavophiles in their belief in the intrinsic worth of purely Russian culture. The centre of their faith was in the peasant masses, those "natural" Socialists, with their primitive agrarian communism surviving in the institutions of the land commune ("obshchina") and the village assembly, or "mir." Russia, they held, ought to build up her civilization with these two institutions as its corner-stones. They would enable her to escape the miseries of Capitalism, and pass directly to a state of Socialism. Capitalism was an alien growth, artificially forced upon the soil of Russia by the deliberate and wrongful policy of its rulers, backed by the selfish interests of the bourgeois class. Thus Peter the Great's encouragement of industry was looked upon as his "crime." The function of the intelligentsia was to lead the peasant masses in their return to, and progress along, Russia's rightful path of development. The doctrines of the Narodniks were shared by the revolutionary party known as "The Will of the People," who became notorious for their terrorist activities. These doctrines were at their zenith in the '70's and '80's of the nineteenth century, and included among their followers many writers of distinction. Herzen and Mikhailovsky are perhaps the best known of the Populist school; other names of importance are those of "V. V.," Nikolai-On, Korsak, Karishev.

The second period of sociological thought, lasting from the '90's to the outbreak of the Great War, showed a transition to Marxism and industrial Socialism.

The Marxian school of economists had always opposed the Narodnik doctrines, but it was only in the '90's that the actual progress made in the industrialization of the country, in spite of the theoretical objections made to it,

lent force and colour to their arguments.¹ The later Narodniks claimed Marx as their spiritual father, but declared that he himself had given them authority for their belief that Russia could escape the capitalistic phase of development.² The Marxians, however, adopted their master's economic interpretation of history, and welcomed the advent of Capitalism, as a necessary stage on the path to Socialism. They admitted its evils, and the misery which inevitably accompanied its growth, but refused to allow these to blind them to the educative and cultural mission of Capitalism. It was a "preparatory school" which had to be passed through before the higher stage of Socialism could be attained. The Romanticists of the Agrarian school had combated the formation of an industrial proletariat, since they argued that the people themselves would be infinitely happier as free agricultural producers, than as helpless wage-slaves in a merciless capitalist system. The cold scientific analysts of the Marxian school, on the other hand, welcomed the appearance of a proletariat, since they saw in it the great army which would finally carry the inevitable class war to a victorious issue.

Thus the centre of interest in Socialist thought was transferred from the peasant masses to the growing industrial proletariat of the towns. Much of the idealism surrounding the peasantry was dissipated; the "mir" was recognized to be simply a convenient grouping of the population for taxation purposes, the communal holding of land simply

¹ Simkhovitch, V. G., *Marxism versus Socialism*, New York, 1913, Chap. IX, p. 202. The author voices the idea that, to be successful, any social theory must be in harmony with the conditions or dominant desires of the community at the time, so as to give it a reasonable chance of realization in the not too far distant future. *Vide* also Stone, N. I., "Capitalism on Trial in Russia," in the *Political Science Quarterly*, edited by the Faculty of Political Science of Columbia University, New York, 1898. See also Masaryk, T. G., "The Spirit of Russia," translated from the German original by Eden and Cedar Paul, London, 1919. Vol. II, Chap. XVIII, *Modern Socialism: Marxism and the Social Democracy*, etc.

² Letter of Karl Marx, written in 1877 in reply to a Russian critic: "If Russia will continue to follow the course she entered upon after 1861, she will lose one of the most favourable opportunities which the historical process has ever given to a people to avoid all the vicissitudes of capitalist development." *Juridichesky Vestnik*, 1888.

an obstacle to agricultural progress. Plekhanov began the organization of the Social Democratic Labour Party, which was finally consolidated in 1903. The activities of the party culminated in the revolutionary outbreaks of 1905, after which its fundamental division into different groups became increasingly distinct.

The right wing, headed by Peter Struve, abandoned the Marxian doctrine of revolutionary progress, and adopted the evolutionary point of view. They held that the transition to the Socialist State could best be effected by the slow and peaceful methods of constitutional reform. Hence they welcomed the advent of the Duma, and participated in its activities. The left wing was composed of extremists, who revived the terrorist activities of earlier days in the murders of the ministers Sipiagin and Plehve, and to whom the name of Social Revolutionaries was given. After 1903, however, the Bolshevik, or Majority, fraction of the Social Democratic Party, broke off from the main body, and pursued a line of development which culminated in their seizure of power in October, 1917. They were Revolutionary Socialists, as distinct from the "evolutionary" Marxians under the leadership of Struve. A prominent figure among them was Lenin, or Il'in, as he was known in his earlier writings.

An outline of the doctrines they professed will explain the attitude of the party. They were Marxians, but combined with their Marxian doctrines the revolutionary ideas of the old Narodniks. Russia was to escape the evils of Capitalism, not by remaining an agricultural country, but by training her industrial proletariat in revolutionary tactics until it was able, with the assistance of some kind of agrarian movement, to overthrow the bourgeois structure of society, and introduce the social revolution, based on the dictatorship of the proletariat. Thus their main doctrine was that of "direct action." They refused to co-operate with the Moderates in their projects of social reform. While the Menshevik (Minority) section of the Social Democrats fought seats for the Duma the Bolsheviks boycotted it. Another vital difference between the Bol-

sheviks and the "legal" Marxians, lay in the rôle they respectively assigned to the proletariat. Struve, in his periodical *Osvobozhdeniye* (*Liberation*), published in Stuttgart, advocated the adoption of a common line of action by all parties who were opposed to autocracy. On the fall of the latter a Parliamentary system would be established, in which all these parties would be represented. Reliance was largely placed on the Liberal bourgeoisie of Russia, among the Zemstvo leaders, the intelligentsia, etc., and to the proletariat comparatively little significance was attached. The latter, however, was, as we have seen, in the forefront of the Bolshevik scheme. Lenin, in his periodical *Iskra* (*The Spark*), which appeared during the years 1900-7, advocated the preparation of the proletariat for revolutionary mass movements, by the formation among them of professional revolutionary organizations.

THE CONSTITUTIONAL REFORM.

In the previous section we have seen something of the ferment of Socialist ideas, which was occupying the time and attention of a large section of thinking people in Russia. This was not paralleled by any tendencies to reform on the part of the authorities. Indeed the reign of Nicholas II was definitely reactionary.¹ The growth of local self-government, in the shape of Zemstvo activities, was looked upon with disfavour, and their powers were being systematically limited, since these bodies were suspected of becoming strongholds of Liberal, or even Socialist, opinion. The same suspicion fell upon the Universities, where the students were subjected to severe measures of police repression. Instead of crushing the prevalent social unrest, this policy had the effect of driving it underground, and making it more violent in its manifestations. Political assassinations became frequent, the victims including such prominent personalities as Sipiagin, Minister of the Interior, Bogolievov, Minister of Education, and Bogdanovitch, Governor of Ufa. Peasant risings took place in the south of Russia

¹ Drage, Geoffrey, "Russian Affairs," London, 1904, p. 21.

in 1902-3. These found their counterpart in the towns, in industrial disturbances at Rostov-on-the-Don, Baku, Odessa. All demands on the part of the opposition parties for reforms were met with a refusal, and an increase in the severity of the repressive measures employed.

The Russo-Japanese War ended in disaster for Russia. The weakening of the central authority, and the general disorganization which followed, enabled the spirit of revolt to find expression in the general wave of revolution which spread over the whole country. Destructive riots and disturbances in the towns found their echo in agrarian murders and the burning of homesteads which went on in the country districts. It has been estimated that the financial loss inflicted upon Russia by these events amounted to a total of about £200 million sterling.¹

A considerable part in the calming of the revolutionary storm was played by the Tsar's promulgation of the Manifesto of 30 October, 1905,² upon which was based the Constitutional Reform of the same year. By providing Russia with a representative Government this Reform was designed, according to the hopes of its partisans, to remove the medieval anomaly of autocracy from modern Europe, and to place the country on a footing of political equality with the democratic states of the West.

The main provisions of the Manifesto were as follows : (1) The principles of civic liberty were affirmed to all, in the shape of inviolability of the person, liberty of conscience, of speech, of assembly, and of forming associations ; (2) representative government was to be established on a franchise system to be drawn up later ; (3) no law was to have effect without the consent of the newly-established representative body.

It is interesting to see under what circumstances the Manifesto was issued, and what character the reform based on it might therefore be expected to have. A description

¹ Appendix A for detailed figures as to the nature and extent of the damage inflicted by the revolutionary movement in various parts of the country.

² Appendix B—text of the Manifesto granting the Constitution.

of the events leading up to the signing and issuing of the Manifesto is to be found in the *Memoirs of Count Witte*,¹ and is interesting as having been written by one who took an active part in the proceedings which he describes. The author did not in any way doubt the necessity of instituting a constitutional régime in Russia, and further notes the useful effect of the Manifesto in "destroying that unity of front which made the camp of the opposition so formidable," and hence facilitating the restoration of order throughout the country. His strong objection is that the "Manifesto cut Russia's past from her present as with a knife. The historical operation was surely necessary, but should have been performed with greater care and more precautions." He adds that, "Many suspected . . . that the constitution had been granted by the Emperor in a fit of panic, and that as soon as his position improved, he would so manipulate the constitution as to annul it and turn it into a ghastly farce."

A perusal of Witte's chapter, where he gives in detail all the circumstances of the time, leaves one with the impression that this grave step in Russia's history was taken in an atmosphere of uncertainty and intrigue, by no means in keeping with its import. We find the Tsar taking the advice of Ministers with opposing views (Goremykin and Witte), and alternately acting in accordance with the ideas of one or the other. There was no clear consistent policy, but the whole procedure was vacillating and nervous. It was, indeed, carried out under the pressure of actual revolt, there being at the time a tram, railway, and general strike in Petrograd, rendering it necessary for Witte and the other Ministers to go to Peterhof by steamer for their conferences with the Tsar. Hence the Reform necessarily bears the character of being a panic-stricken concession to popular clamour, rather than the clear-minded and deliberate action of an authority really convinced of the necessity for constitutional reform, and honestly

¹ Witte, S. J., Count, *The Memoirs of Count Witte*, Translated and edited by A. Yarmolinsky (with a portrait). London and New York, 1921, Chap. 9.

determined to carry it out prudently, and with the necessary safeguards.¹

Whatever the intrinsic defects of the Manifesto it was at least effective in calming the people and helping the authorities in the task of restoring order. The policy of the Government during the next few years was such as to justify the predictions of the malcontents among the Socialist groups, who had declared that the autocracy had no real intention of granting a constitution, and would reaffirm its absolute power as soon as it felt strong enough to do so. The motto of the Premier, Mr. Stolypin, was "sperva spokoistvie, potom reformy" ("first of all order, then reforms"), and in pursuance of this object, repressive measures of the utmost severity were employed. The whole country was placed under martial law. Punitive expeditions were despatched to those parts of the country in which the fires of revolution still smouldered. All traces of unrest were grouped as "revolutionary," and were ruthlessly crushed.

The spirit of reaction also manifested itself in the progress of the newly-established Representative Assembly. The latter met four times: for short periods in 1905 and 1907, for five years, 1907-12, and from 1912 until the Revolution of 1917.

The first and second Dumas are sharply distinguished from the later Assemblies. They met between 1905 and 1907, which has been described as the "heroic age" of the Russian Duma.² Both the delegates themselves, and the

¹ Compare the slow and careful methods adopted by the British Government in instituting constitutional government in India. The Act of 1919 granted partial constitutional powers only, which were to be extended at the end of ten years. (Vide *The Times*, 16 Jan. 1923, articles on "The Constitution of India," "India and her Parliament.") The political similarity between India and Russia is very striking. In both countries we have huge inarticulate masses of illiterate peasantry. In both countries we have these masses swayed by small groups of educated men, whose enthusiasm for reform and theoretical knowledge far outweigh their practical experience. In the case of India, this political immaturity, and her consequent continued need for help and sympathetic guidance, have been insisted upon by the British Government. In Russia, however, there was no such control in the background, and the forces of the extremists had full scope for their activities.

² "Russian Realities and Problems," op. cit., p. 25, *The Representative System in Russia*, P. N. Milukov.

country in general, were full of enthusiasm at the inauguration of the new régime, and great and far-reaching reforms were looked for in every sphere. In the First Duma, the party of the Constitutional Democrats ("Cadets") predominated, strongly influenced by the Labour and Socialist groups of the more extreme Left. The life of the Assembly was short but stormy. There was open hostility between it and the Government, and little or no unity existed among the parties represented in it.¹ Consequently no real constructive work could be attempted, and the Government simply dissolved it after it had sat for 73 days. In the Second Duma, which met in 1907, the Labour and Socialist groups predominated.² It proved to be as uncompromising as its predecessor, and was also dissolved after a slightly longer life of 103 days.

In the elections preceding these two Dumas, the preponderance of voting power had lain with the peasants, who were believed by the Government to represent the conservative and traditional elements in the nation. This had been proved to be incorrect, and by a change in the electoral law, the balance of voting power was transferred from the peasantry to the landed gentry, from whom it was hoped more satisfactory results would be obtained. This transference is made clear by the following table:—

		Social Composition of the Duma.	
		Before 1907.	After 1907.
		Per cent.	Per cent.
Landed gentry	. .	34	51
Peasants	. .	43	22·4
Citizens	. .	23	24·2
Working men	. .	3·4	2·3

In consequence the Duma proved to be a much more compliant and less fiery body in the second phase of its existence, which Professor Milukov calls its "age of political mimicry." The change in the electoral law ensured that, in the Third Duma, which sat from 1907-12, the

¹ Williams, H., *Russia of the Russians*, op. cit., Chap. 2. "The Bureaucracy and the Constitution."

² Appendix C. Statistics showing the strength of the various parties in the four Dumas.

parties of the Right wing, and the newly-formed Centre, formed a strong majority. The "Octobrists" (Constitutionalists) were the predominant party, but they lost the favour of the Government by the willingness they displayed to collaborate with the Opposition groups by working with them on Committees and so on. Consequently they yielded place to the Nationalists in the Fourth Duma. Both Assemblies were entirely uneventful, and, in the opinion of the impatient spirits among the reformers, entirely useless.

The Duma has been severely censured for its failure to become a real force in the political life of the country, and a strong representative of the people. But the political transformation of a wide-flung Empire was a task which demanded a considerable amount of time for its fulfilment; the Duma, therefore, worked under limitations which, however necessary in the cause of political safety, were a serious hindrance to its development. In the first place, the electoral law was so devised as to keep the preponderance of voting power in the hands of the reactionary party of the landed gentry.¹ Secondly, the extensive rights which had been granted in theory to the Duma, were very much limited in practice. In the legislative sphere, the authority of the Duma was continually liable to be set at naught by the use of Imperial Edicts and Orders in Council. So-called emergency legislation might be passed when the Duma was not sitting, and in some matters, e.g. military affairs, the Duma was not permitted to legislate at all. The representative body's control over the Budget was largely neutralized by the fact that items of expenditure which had been customary before 1905, were "protected" from any control. Since such "protected" expenditure amounted to no less than 47 per cent. of the total expenditure in the 1908 Budget, it was obvious that the influence of the Duma was more or less negligible.² Since the Cabinet was not responsible to the elected Chamber, the Duma's

¹ Vide Appendix D for an explanation of the Electoral Law.

² Aleksandrov, N., *The Social-Democratic Party in the Third Imperial Duma*, (R.) 1910. In *Tracts on Russian Politics, 1907-11*, p. 9, "The Party's attitude towards the Budget."

control over the administration was also illusory. The "illegal" position of the Opposition also enhanced the difficulties of the situation, the Government obstinately refusing to recognize the legality of that body. Finally, the Upper House, called the *Council of the Empire*, showed a tendency to rely more on the actual achievements of a bureaucratic past, than upon the promises of a democratic future, and were disinclined to countenance anything in the way of sweeping reforms. Half of its 200 members were nominated directly by the Tsar, and the other half were elected by the nobility of each province, Chambers of Commerce, the Universities, and the Clergy. It was, therefore, only partly indifferent to Imperial favour, and hence inclined to act in accordance with Imperial hints. Indeed the advocates of reform declared despairingly that liberal legislation could expect nothing from the Upper House but "decent burial."

To outward appearances, therefore, the period 1905-14 would seem to mark the triumph of reaction in the political sphere. But a deeper analysis shows that very real gains had been made in the cause of reform. The very fact of the continued existence of the Duma was an immense gain in itself, as being an open admission, in theory at least, of the principle of representative government. Its sittings provided the delegates with a valuable training in Parliamentary methods, even if they did not appear to be productive of far-reaching results in the practical sphere.

Since only the short period of twelve years elapsed between the institution of the Duma in 1905, and the outbreak of the Revolution in 1917, it is very difficult to say what the future development of Russia might have been, had her path lain along normal lines. Whether autocracy would have completely reasserted its powers, and made the representative government representative in name only; or whether the democratic tendencies of the age would have been strong enough to evolve out of the Duma a really effective body, is a question to which it is not possible to give any definite answer. On the whole, the probabilities are in favour of the latter outcome of the

situation, but the process of evolution would, in all likelihood, have been extremely slow.

A study of the period convinces one that the absence of a middle road in Russia's politics was one of her greatest disadvantages. Both of her main parties, the Government and the Opposition, were entirely sincere, and were actuated by the highest motives. But they were following completely irreconcilable paths. There is no reason to doubt that the Government representatives honestly believed they were acting for the best in restoring order in the country before proceeding to measures of reform. They took the same point of view as was adopted by British Ministers in dealing with Ireland—"there must be no compromise with murder." They were also sincere in their belief that it was unsafe to grant constitutional reforms too rapidly in a country which they believed to be politically immature. In this we may compare their attitude to that of British Ministers in their dealings with India. The Opposition groups, on the other hand, were equally honest in their conviction that only by far-reaching reforms could the existing tyranny and oppression be removed. Each group was blind to the merits of their opponents, and saw them only as obstacles to progress. This absence of a "golden rule of compromise" is responsible for much of the tragedy which darkens the pages of Russia's history. It makes her development a matter of cataclysmic leaps and bounds, often involving immense suffering for her people, rather than a slow, even, and painless growth.¹

¹ Sarolea, Charles, *The French Revolution and the Russian Revolution, A Historical Parallel and a Forecast*. Edinburgh and London, 1906, p. 31. The author expresses the opinion that Russia cannot be saved by the establishment of a Parliamentary form of government, since she is "politically bankrupt" in free institutions to support it, and has no force of public opinion to control it. He sees the only hope in the establishment of a liberal despotism.

APPENDIX. GEOGRAPHICAL SURVEY.

TABLE A.

Russian Cereal Crops, E. T. Peters, p. 34. Territorial distribution of the crops by regions 1901-8. Table VIII, "Percentage of wheat, rye, barley, oats and corn, produced in each region and specified division of Russia."

Regions.	Percentage of area cultivated.					Percentage of quantity produced.				
	Wheat.	Rye.	Barley.	Oats.	Corn.	Wheat.	Rye.	Barley.	Oats.	Corn.
European Russia—										
Average black-soil division .	72.6	57.2	64.8	50.4	82.6	67.5	57.9	62.4	49.1	81.3
Average non-black-soil division . .	3.7	31.6	18.6	34.3	—	4.5	29.2	17.4	33.6	—
Average for European Russia proper .	76.4	88.8	83.4	84.7	82.6	72.1	87.1	79.9	82.8	81.3
Poland . .	2.1	6.9	5.0	6.1	—	3.4	8.6	6.6	7.0	—
Northern Caucasus . .	12.6	0.9	9.6	1.9	17.3	14.2	0.9	11.2	2.1	18.6
Average for European Russia .	91.1	96.6	98.0	92.9	99.9	89.8	96.7	97.8	91.9	99.9
Asiatic Russia:										
Siberia .	6.1	3.2	1.2	6.0	—	6.9	3.2	1.2	6.6	—
Central Asia .	2.7	—	0.7	1.0	—	3.1	0.1	0.9	1.3	—
Average for Asiatic Russia .	8.8	3.3	1.9	7.0	—	10.1	3.3	2.2	8.0	—

The above table shows clearly the importance of the black-soil region among the grain-producing areas of Russia.

30 THE ECONOMIC DEVELOPMENT OF RUSSIA

TABLE B.

The Russian Year Book for 1915, ed. by N. Peacock. Total population of Russia as compared with that of other countries.

Countries.	Population.
Russia (1913)	174,099,600
U.S.A. (1910)	93,402,200
Germany (1910)	65,140,000
Aust.-H. (1910)	51,340,400
England (1910)	43,365,600
France (1908)	39,267,000
Italy (1911)	34,686,700
Belgium (1910)	7,516,700

TABLE C.

Ibid. Mortality rates in Russia and other countries, per 1,000 inhabitants.

Russia	29·4
Britain	16·0
Germany	19·8
Aust.-H.	24·1
Hungary	26·2
Italy	21·8
France	19·6
U.S.A.	20·4

TABLE D.

Ibid. Groups of Races in the Empire.

Russians	65·5
Turko-Tartars	10·6
Poles	6·2
Finns	4·5
Jews	3·9
Lithuanians	2·4
Germanic Group	1·6
Cartvelians	1·1
Caucasian Mountaineers	0·9
Armenians	0·9
Mongols	0·4
Others	2·0

 100·0

TABLE E.

Ibid. Religions within the Empire.

Orthodox . . .	69.90
Mohammedans . .	10.83
Roman Catholic . .	8.91
Protestants . . .	4.85
Jews	4.05
Other Christians . .	0.96
Other non-Christians	0.50
	<hr/>
	100.0

TABLE F.

Ibid. Russia's population per square verst as compared with that of other countries.

Russia	8.9
Belgium	273.1
Holland	177.2
England	157.9
Italy .	132.2
Germany	127.7
Austria	85.6
France	83.1
U.S.A.	10.9
Norway	8.1

32 THE ECONOMIC DEVELOPMENT OF RUSSIA

TABLE G.

League of Nations. "Report on the Economic Conditions in Russia with special reference to the famine of 1921-2 and the state of agriculture." Geneva, 1923. Annex IX, p. 131.

Area of Country and Density of Population in 1913.

Government.	Area, sq. miles.	Population.	Density per sq. mile.
European Russia	1,867,738	125,683,800	67·3
Poland	43,804	11,960,500	273·0
Ciscaucasia	85,768	5,470,600	63·8
Total, Russia in Europe . .	1,997,310	143,114,900	71·7
Transcaucasia	95,405	7,042,200	73·8
Siberia	4,831,882	9,788,400	2·0
Steppes	710,905	3,893,200	5·5
Turkestan	420,807	6,556,700	15·6
Trans-Caspian provinces . .	235,120	507,500	2·2
Total Russia in Asia . . .	6,294,119	27,788,000	4·4
Total Russian Empire (ex- cluding Finland)	8,291,429	170,902,900	20·6

TABLE H.

Russian Year Book for 1915. Division of the population into professions and trades.

	Per cent.
Agriculture	74·6
Industry—working up raw material	9·6
Commerce	3·8
Transport	1·6
State service	1·4
Private employment	4·6

TABLE I.

Ibid. Comparison between town and rural population in Russia.

Town population. Per cent.	Rural population. Per cent.	
13·2	86·8	Europ. Russia
23·3	76·7	By-Vistula provinces
13·1	86·9	Caucasus
11·6	88·4	Siberia
13·6	86·4	Central Asia
15·1	84·9	Finland

CONSTITUTIONAL REFORM.

TABLE A.

Hoetzch, Otto, *Russland*, Berlin, 1913, p. 135. Estimate, by Prof. Migulin, of the material damage caused by the revolutionary movement of 1905.

(a) *Direct Damage.*

	Million roubles.
1. Burning of Baku	100
2. 2,500 estates burned down, each worth 100,000 roubles	50
3. Odessa harbour	50
4. Industrial establishments destroyed	40
5. Towns, boroughs, and villages pillaged, 60 in number (including Kiev, Odessa, Rostov, but without Moscow)	60
6. Material damage in army and navy	50
Total	<u>350</u>

Indirect Damage.

1. Railway losses through diminished traffic	40
2. Loss of wage-earning classes as consequence of strike	200
3. Transfer of capital abroad by refugees	200
4. Outflow of gold owing to Russian families going abroad	100
5. Withdrawal of deposits of foreign firms	100
6. Loss through bankruptcies and contraction of credit	100
Total	<u>740</u>
Loss in State and commercial securities	1,000

Total cost of the revolution, at the beginning of 1906, therefore estimated at 2,000 million roubles, or £200 million sterling.

TABLE B.

Text of the *Manifesto* issued by the Tsar, on 30 October, 1905.

"The disturbances and disorders taking place in the principal cities and in numerous districts of our Empire, fill our heart with the utmost grief. The welfare of the Russian Tsar is inseparable from that of his people, and their griefs are equally his. From the present excitement, serious disorder may arise among the people, and become a menace to the unity and integrity of the Empire.

"It is a duty imposed upon Us by the office of Tsardom, to exert all the force and reason at our command to bring to the speediest possible conclusion this state of chaos, involving so much danger for the Empire. We have first of all ordered the competent authorities to take measures for the suppression of direct outbreaks of disorder, rioting and outrage, so as to protect those peaceful citizens whose aim is the quiet fulfilment of the duties binding upon each person. We have further considered it necessary to unify the activity of the highest Government to ensure the successful execution of the general measures which we have directed towards the pacification of the life of the State.

"We impose upon the Government the duty of carrying into execution the following expression of our inflexible will:

"1. To give the people civic liberty on an impregnable foundation, upon the principles of real inviolability of the person, liberty of conscience, of speech, of assembly, and of forming associations.

"2. It is not desired to stop such elections to the Imperial Duma as have already taken place. But as far as is possible in the short time remaining before the convocation of the Duma, we wish to give some share in its deliberations to these classes of the population who are at present altogether deprived of the franchise. This will leave the further development of the principle of the general franchise to be developed in the newly-established legislative order, and

"3. To lay it down as an unchangeable rule, that no law can become valid without the consent of the Imperial Duma. Thus the representatives of the people can be assured of a real share in supervising the legality of the acts carried out by the authorities whom We have established.

"We call upon all loyal sons of Russia to be mindful of their duty towards the Fatherland, to render assistance in putting an end to this state of unparalleled chaos, and to exert, along with Us, every effort for the re-establishment of tranquillity and order, and the restoration of peace to our native land."

TABLE C.

"Russian Realities and Problems," p. 25. *The Representative System in Russia*, P. N. Milukov.

Composition of Parties in the First and Second Dumas.

Parties	First Duma.	Second Duma.
Right	? ¹	63
Moderate Right	38	34
Constitutional Democrats (Cadets)	187	123
Poles	32	39
Left Wing (Labour Group)	85	97
Socialists	26	83
Independents	112	22

Composition of Parties in the Third and Fourth Dumas.

	Third Duma.	Fourth Duma.
<i>Right Wing.</i>		
Right	52	65
Nationalists	93	88
	<hr/>	<hr/>
	145	153
<i>Centre.</i>		
New (Nationalist) "Centre"	—	32
Octobrists	133	98
	<hr/>	<hr/>
	133	130
<i>Left Wing.</i>		
Poles and Mussulmans	26	21
Progressives	39	48
Constitutional Democrats	53	59
Labour groups	14	9
Social Democrats	14	15
	<hr/>	<hr/>
	146	152

¹ They preferred to be classed with the Independents.

TABLE D.

The Representative System in Russia. "The Electoral Law."

The system of representation is artificial and depends entirely upon the Government. The population is divided into "curias" or groups, on the principle that, the more democratic and numerous a group is, the more its electoral power is limited. There were three "curias" in the town, namely: (1) the wealthy capitalists, (2) middle class-citizens, (3) the working classes. The three corresponding "curias" in the country districts were: (1) the large landed proprietors, (2) the small landed proprietors, and (3) the peasants of the Russian communities. The vote, except in six large cities, was not recorded by constituencies, but by special electors chosen by the constituencies. The number of electors given to the constituencies varied in opposite proportion to the number of the population. It worked out at:

One elector per
230 landed gentry.
1,000 wealthy citizens.
15,000 middle-class citizens.
60,000 peasants.
125,000 working men.

The highest electoral unit was the provincial electoral assembly, where the electors for the Duma were chosen. About fifty of these existed throughout the Empire.

Part II.

TRADE.

CHAPTER III.

THE TRADE BALANCE AND TARIFF POLICY.

RUSSIA'S foreign trade was made the subject of the same theoretical controversies that characterized the interpretation of all the other branches of her economic life. A modern school of thinkers, to whom the title of "Eurasians" has been given,¹ take exception to Russia engaging to any serious extent in international trade; she was in their view a link, and an almost independent link, between East and West, a "Eurasian" country. Their arguments rest mainly on the facts of Russia's geographical structure. As has been seen, Russia consists of an immense land mass, with no free access to the sea. Thus, the "Eurasians" point out, such of her produce as was destined for the international market had first of all to bear the expense of long and costly transport by land. Its access to the open sea was subject to the consent of those Powers who controlled such access, and was constantly liable to interruption in case of war. The Straits of the Dardanelles, for instance, were closed to Russian commercial shipping four times in the course of the last seventy years: in 1853-6, during the Crimean War; in 1877-8, during the Russo-Turkish War; in 1912, during the Turko-Italian War; and in 1914, at the beginning of the Great War. On each occasion, a very marked diminution was immediately shown in the statistics for the import and export trade on the Black Sea. The "Eurasians" therefore hold that Russia's economic structure ought to be based on self-support and internal exchange.

¹ The chief names among the leaders of this School were: P. Savitsky, G. Suvashchinsky, Prince E. S. Trubetskoy, G. Florovsky. *Vide Anticipations and Fulfillments*, 1st Vol. Sophia 1921, 2nd Vol. Berlin, 1923. (R.)

In their theory, however, they neglect the realities of the situation as they existed before the outbreak of the Great War. Russia was not independent of the West : on the contrary, her whole economic development had been based upon the financial aid extended to her by the Powers of Western Europe.¹ The continuance of this assistance depended on the punctilious fulfilment by Russia of her foreign financial obligations.² This, in its turn, called for a balance of exports over imports, which, it was hoped, would ensure an ultimate inflow of gold into the country, and support the stability of the general economic structure. Hence great attention was paid to the securing of a favourable balance of trade, leading to a constant pressure to increase exports, particularly that of grain. In reality, therefore, Russia found herself forced to enter upon the world market to an ever-increasing extent. The ideals of the "self-supporting" school could only have been realized after Russia had completely emancipated herself from dependence upon foreign financial assistance, a process which had only just begun to manifest itself in the period preceding the war.

THE TRADE BALANCE.

A study of the statistical methods employed in arriving at the figures making up Russia's trade balance, demonstrate the need for caution in founding anything but very general conclusions upon it. The actual figures³ show that from 1902-12 the favourable balance was maintained at a yearly average of about 330 million roubles ; in 1911 it reached the sum of 429 million roubles, while in 1913 it

¹ The importance of foreign loans in every sphere of the national economy is pointed out in each of the succeeding sections.

² In this respect, Russia's financial reputation stood very high. The fact that she had never defaulted, and had even continued to pay interest to foreign bond-holders during the Crimean War, was constantly used as a recommendation when floating new loans.

³ *General Review of Foreign Trade along the European and Asiatic Frontiers*, edited yearly by the Customs Duties Department, 1912, 1913, and 1915 issues. (R.)

fell as low as 146 million roubles. On the outbreak of the war in 1914 the trade balance suffered an immediate change, which reacted unfavourably upon Russia; for 1914 and 1915 it showed a deficit of 141 million roubles, and 736 million roubles respectively. This is in strong contrast with the previous eighteen-year period from 1894 to 1912, during which the favourable trade balance showed an almost constant increase—apparently not adversely affected by the protective Customs tariff.¹

There was considerable lack of uniformity as to the amount of the trade balance, even in official figures published within the country. This is shown by a comparison between some of the *General Review* figures and figures taken from the *Russian Money Market*.² These figures show serious discrepancies, which in 1911 and 1912 amounted to over £8 million and £5 million respectively.

The basis of valuation in the official Russian returns was in the first place that of Customs prices.³ If a simple method of verification is adopted, this method of valuation can be shown to lack absolute accuracy. The method was as follows. In the Customs publication, *The General Review of Foreign Trade*,⁴ there is given a list of exports and imports from 1904-15, in thousands of poods and thousands of roubles. By multiplying the 1910 figure in poods by the average Customs price for the commodity in the monthly publication⁵ we ought to get the amount in roubles, if the method of valuation is correctly applied. The following table shows some characteristic results. A plus indicates that the figure thus worked out is larger than the figure in the *General Review*, and a minus the opposite.

¹ Appendix A, figures on the trade balance from 1894-1915.

² Appendix B, comparison between figures on the trade balance taken from the *General Review*, and those from the *Russian Money Market*, 1908-12, edited by the Ministry of Finance, Special Chancery for Credit. Diagram 2, Commercial Balance of Russia, exports and imports.

³ P. xv of the December, 1910, issue of *Foreign Trade on the European Frontier*, monthly publication of the Customs Department. (R.)

⁴ 1915 edition, p. 31.

⁵ *Foreign Trade on the European Frontier*.

42 THE ECONOMIC DEVELOPMENT OF RUSSIA

Year 1910. In thousands of roubles.

Commodity.	Figure worked out.	Figure in <i>General Review</i> .	Difference.	
			Sterling.	In Thousand Roubles.
EXPORTS.				
Wheat	404,557	405,198	-£64,100	- 641
Rye	29,998	29,867	+ 13,100	+ 131
Barley	159,056	158,521	+ 53,500	+ 535
Oats	63,800	63,698	+ 10,200	+ 102
Maize	19,197	19,172	+ 2,500	+ 25
Flour (corn)	12,685	12,555	+ 13,000	+ 130
Flax	66,360	67,151	- 79,100	- 791
Hemp	9,733	9,728	+ 500	+ 5
Butter	51,112	51,294	- 18,200	- 182
Eggs	63,687	63,694	- 1,600	- 16
IMPORTS.				
Rice	10,189	8,241	+ 194,800	+ 1,948
Coffee	6,666	6,739	- 7,300	- 73
Herrings	20,203	20,125	+ 7,800	+ 78
Coal	31,122	30,283	+ 83,900	+ 839
Coke	3,882	3,784	+ 9,800	+ 98
Cast iron	174	597	- 42,300	- 423
Iron	2,858	2,971	- 11,300	- 113

Assuming that the basis for the commodity groups is the same in both cases, it will be obvious that these discrepancies are sufficiently serious to render it doubtful whether the trade balance figure for 1910, and, by inference, for other years as well, is to be relied upon.

A second method of valuation, that of declarations, is defined in the *General Review* as follows :¹

"At the basis of the valuation of goods are placed the Customs notes ('zapisi') according to the declarations of the senders and receivers of goods, verified by the data for the principal goods contained in the Department of Customs Incomes, quoted in the exchanges, and also the exchange bulletins."

A Russian writer, Mr. Guryev, gives information² which

¹ 1915 edition, Introductory page.

² *Bulletin russe de statistique financière et de législation* for 1897. Petrograd 1894-1900. Article by "G. B. V." (Mr. Guryev.)

amplifies this somewhat brief statement, particularly as regards importation into Russia. He discusses the intrinsic value of importers' declarations, taking as an example rails sent from British exporters in the year 1894. A comparison between the prices declared on their passing through the Russian Customs Office at Petrograd and the exchange price of rails at Petrograd at the same time, shows that the first was considerably greater than the second. It is obviously absurd that Russia should be buying rails from Britain at 556.50 francs per ton, when the whole of industrial Europe was ready to deliver to her precisely the same commodity at 110 francs per ton. The writer holds that the total error involved for Russian importation by such overestimates of price, amounts to at least 20 per cent., adding that the declarations of high prices at the Customs Office might justify the imposition of a high scale of prices when marketing the imports. This method of import valuation based on declarations is therefore shown to afford an insecure basis for calculations as to the total value of importation into Russia. Hence one of the two elements going to make up the trade balance is obviously untrustworthy.

As regards exporters' declarations, it is left to the German student¹ of the Commercial Treaty of 1894 to make suggestions as to their probable defects. Mr. Guryev was inclined to look upon these declarations as more trustworthy, but since he was an apologist for the Russian financial system it was natural that he should try to minimize Russian importation as far as possible, and thus suggest that the trade balance was more favourable than it appeared in official statistics by some hundred million roubles. The German author, however, being quite disinterested from this point of view, is in a position to examine the question as to whether these exporters' declarations are really reliable. He takes as his starting point Mr. Guryev's statement that the valuation for export is officially made by the Customs

¹ Zweig, Emil, *Die Russische Handelspolitik seit 1877*. Also Human, Arthur, *Der deutsch-russ. Handels-und Schifffahrtsvertrag von 20 März 1894*. Leipzig 1900, pp. 55-62.

44 THE ECONOMIC DEVELOPMENT OF RUSSIA

officers, and that for this purpose they adopt the local exchange prices, for such goods at least as are quoted on the exchanges. As, however, the exporter had to pay for this valuation a sum representing a certain percentage of his declaration, the author maintains that he would have a direct interest in minimizing the value of the goods.¹ If this assumption is correct, the second component of the trade balance is also shown to have serious defects.

In view of the importance of the corn export as an element in Russian trade statistics²—its value amounted to half the value of Russia's total exports—it is important to note certain criticisms, brought forward by Mr. V. S. Pokrovsky, of its valuation by the Customs authorities.

His first conclusion is that Customs prices may be relied upon in all questions of a general character, since, within well-defined limits, they follow after market prices. He bases his conclusions upon a comparison, extending in five-yearly spells from 1851 to 1885, between the average Customs valuation, and the price of each cereal in its most important market. The years 1865–71, during which an unsuccessful effort was made to establish permanent Customs prices, are omitted from consideration. His results were as follows: in the case of wheat, the greatest average deviation of the Customs price from the price in Odessa was not more than 5 per cent.; rye (cp. Petrograd), 16 per cent.; barley (cp. Odessa), 31 per cent.; oats (cp. Petrograd), 22 per cent. If a shorter period from 1871 to 1885 is taken, the results are even better, being wheat, 4 per cent.; rye, 4 per cent.; barley, 12 per cent.; and oats, 7 per cent.

This, however, does not demonstrate the *intrinsic*

¹ *Customs Statute (Ustav Tamozhenny)*, 1910 edition, article 83, para. 2. (R.) "The List of the Chancery Fees for the composition and transcription of Customs documents, fixes for the export list, and any document of the same kind, for commodities not subject to an export duty, a fee of 20 kopeks per 1,000 roubles declared value." (This equals 0.02 per cent., which might amount to a considerable sum on large quantities.)

² It is a matter for regret that only statistics referring to the period before 1897 are available in this connection. Comparable figures for the twentieth century were not available.

Pokrovsky, V. S., *Collection of Information, historical and statistical, as to the foreign trade of Russia*, Petrograd 1902 (R.), p. 11.

accuracy of the Customs figures, for questions requiring detailed investigation. To test this, he takes figures for the period 1890-7, showing the difference between the Customs valuation of wheat and the Market and London prices. These differences had a considerable effect upon the gross value of the corn export. In 1891, for example, the Customs valuation of the corn export was more than £1 million sterling less than the market cost, while in 1894 it was over £3 million sterling greater.¹

It would therefore seem clear that Russian trade statistics can only be taken as affording useful indications as to general tendencies. In view of the possibilities of error which have been shown to exist, they cannot be said to afford a secure basis for definite conclusions on matters requiring any considerable degree of accuracy.

The question as to whether it is necessary for the financial and economic stability of Russia that a favourable balance of trade should be maintained, has been widely discussed both by Russian writers and by foreign students of the country. Mr. Drage, for example,² in a criticism of the policy pursued by Witte during his tenure of office as Minister of Finance (1893-1903) holds that the maintenance of a favourable trade balance did not have a good effect upon the general economic welfare of the country. As we have seen, Russia during the years 1893-1903 enjoyed a favourable balance, as indicated by the annual excess of exports over imports. This Witte construed in a beneficial light as regards the economic prosperity of the country, and assigned for its appearance three main reasons. The first of these was the increased export of industrial produce; the second, the decreased import of machinery and similar products; the third, the fact that some goods formerly brought from abroad were now supplied by home industry.

Mr. Drage, however, makes a detailed examination of what was really involved in the favourable balance of trade,

¹ Appendix C, Tables showing (a) Customs valuation of wheat compared with Market and London prices, 1890-7, (b) Cost of the five main cereals exported from Russia 1890-7, according to the Market and London prices.

² Drage, G., *op. cit.*, p. 311.

46 THE ECONOMIC DEVELOPMENT OF RUSSIA

particularly with regard to the agricultural classes. The continuance of this balance was a necessity, if foreign creditors were to receive regular payment of interest on the capital they had advanced to found Russian industries and assist in railway expansion. And though the export of industrial products from Russia was increasing, it had not yet attained any considerable proportions, and five-sevenths of the country's exports still consisted of agricultural produce.¹ It is borne in mind that a large proportion of the population of Russia (78 per cent. according to Mr. Drage, although other writers put it even higher) depend entirely on agriculture for their support, it will be obvious that agriculture, in order to perform the double duty of providing nourishment for the home population and affording a large surplus for export, would have to be in a state of high efficiency and productivity. The contrary was, however, the case, Russian agriculture standing very low in the scale of productivity as compared with other nations.

Mr. Drage's conclusion is that the policy of maintaining a favourable balance of trade was carried out at the expense of the agricultural population, who were suffering from physical deterioration and a lowering of the standard of life, even in the richest provinces. Protection tied down the peasantry to primitive methods of production by putting

¹ This statement is corroborated by the following table, found in the *General Review* for 1915:

Export of the Four Groups of Commodities, with their percentage to the total export.

	1894-98.	1899-1903.	1904-08.	1909-13.	1913.	1914.	1915.
1. Food-stuffs	59·5	58·7	59·9	60·5	55·2	54·7	50·2
2. Raw material and half-manufactured goods . . .	34·9	34·4	33·0	33·2	36·9	36·5	36·0
3. Animal products	2·1	2·2	1·7	1·8	2·3	1·5	0·1
4. Manufactures	3·5	4·7	5·4	4·5	5·6	7·3	13·7
	100	100	100	100	100	100	100

Note the preponderance of foodstuffs, although manufactures were making some headway even before 1914.

the price of agricultural machinery far beyond their reach. Further, it raised the cost of living, thus diminishing the amount of stock the peasantry could afford to carry, and still further impoverishing the land through lack of manure. Since the economic strength of the Empire rested mainly on the peasantry and agriculture of European Russia, critics maintained that a policy which led to their impoverishment could not be beneficial to the country. On these grounds they would have preferred to see Russia confining herself to agriculture only, and not endeavouring to develop industries.

This criticism only takes account of the general aspect of the problem, which ought really to be subdivided and studied in detail. A question particularly worthy of consideration would be—From what part of Russia was the surplus corn mainly drawn? It might possibly be found that the contribution from South Russia was of considerable importance, and in this connection it would be interesting to estimate the influence of the German settlers who, in the '70's of last century, converted the region from a sheep-rearing to a corn-producing area, and who held 4,204,000 "dessiatines"¹ (10,930,400 acres) of land, 665,000 "dessiatines" (1,729,000 acres) of which they obtained from the Crown.

Other writers review the problem more from the point of view of the importance of a favourable balance for the maintenance of the gold standard. Here we may point out the distinction between the trade balance, calculated on the basis of the export and import of commodities, and the financial balance, calculated on the basis of the export and import of the precious metals. It may be assumed that the latter is affected by (a) the development of the productive forces within the country, and (b) a financial policy which is directed in general to limiting the increase of liabilities to foreign countries. Mr. Emil Zweig, in his *History of Russia's Commercial Policy since 1877* (i.e. from the introduction of payment of Customs duties in gold) holds that Russia's commercial policy, embodying both

¹ A "dessiatine" = 2.6 acres.

factors outlined under (a) and (b) above, is only to be explained by her policy of territorial expansion, to which, apparently, he attributes the greater part of her foreign debts. Mr. Migulin, on the other hand, attributes the greater part of these debts to the liquidation of the old Mortgage Banks in 1860, and the construction and development of the railway system. Although he wrote in 1905 under comparatively favourable conditions, he seems to look with a pessimistic eye upon the prospects of Russia's home production during the next few decades. He maintained that the only way of increasing Russia's exports—and hence her favourable balance—at comparatively short notice was by means of fresh territorial acquisitions, or at least by the penetration of new areas producing raw materials. On p. 19 of *The War and our Finances* he lays stress on Russia's interests in Persia as regards the production of cotton and tea, and in Mongolia as regards cattle.

If such are the views of a Russian writer, it is not surprising to encounter similar pessimism in the writings of Mr. W. Fajans, a foreign student of Russia's gold standard. His views are of interest particularly in connection with the question as to whether the export of corn was based on unduly limited consumption on the part of the mass of the population. Reviewing the general tendency of Russia's trade balance,¹ he concludes that the prospects of the corn exports from European Russia are practically nil, and its augmentation only possible at the expense of a decrease in consumption. The expansion of corn export from Siberia, he considers, is still a question of the future, while the export of 1906 and earlier was in reality only rendered possible by a reduction in consumption. Assuming the total yield to be 21·25 poods per head, there is a surplus of 2·25 poods per head, which permits of 300 million poods of truly "surplus" corn being exported. The actual amount exported was, however, 514 million poods, the excess of this over the normal figure being 214 million poods, or 71 per cent. The conclusion is accordingly arrived at that, if consumption were raised to a normal average of 19 poods

¹ *Die russische Goldwährung*, pp. 118-79.

per head, export would have to be reduced by 71 per cent.¹ Mr. Fajans goes on to admit that the exportation of timber, flax, eggs, butter, naphtha, showed a tendency to increase, but not at a rate sufficient to counterbalance the stationary condition of the corn export. He takes up the question as to the necessity of limiting imports of iron and steel from abroad so as to have a favourable effect upon the trade balance and stimulate the development of industry within Russia, but does not think that this could be carried out to an extent great enough to produce any real effect.

Figures from Russian sources corroborate these general conclusions² by tracing a continual decrease in consumption below the normal amount, from 19 poods per head in the '70's of last century, to 16 poods at the end of the '80's, and 14 poods by the time 1897 was reached. Such a decrease cannot be taken as an indication of favourable conditions within the country.

It would appear, therefore, that there was considerable foundation for the twofold criticism directed against the Government's policy of securing a favourable balance of trade: namely, that the aim was only attained by introducing an element of artificial regulation into the financial and transport systems of the country, in order to stimulate the grain export, and by limiting the necessary consumption of the majority of the population.

TARIFF POLICY.

Russia's tariff policy during the nineteenth century falls roughly into the three following divisions.

(1) 1800-24: *Prohibitive Tariff*.—Up to 1824, prohibitive duties prevailed: the tariff of 1822 contained 301 articles referring to prohibited imports, and 22 referring to prohibited exports. There was as yet very little inter-

¹ *Ibid.*, pp. 141-61. His statements as to the 19 pood limit are based upon the Russian edition of the Russian Statistical Committee for 1907, pp. 26 to 30.

² Appendix D. Tables showing (a) average amounts exported in years of good and bad harvests respectively, and average export per head, and (b) decrease in home consumption.

course with Western Europe, the country was self-supporting, and only a few articles of luxury were imported. There was no industrial class to feel the burden of the high duties enforced.¹

(2) 1824-76: *Mitigation of Prohibitive Duties*.—Count Kankrin, who was Minister of Finance from 1823-44, desired to encourage home industry, then in its early beginnings. Prohibitive duties were therefore mitigated as far as that industry was concerned. The tariffs of 1850, 1857, 1867, marked a further mitigation of protection. These were passed under the influence of the landowners, who had become consumers of imported goods, and exporters of grain, and were therefore in favour of free trade principles. The financial result of this policy was, however, very unfavourable; during the period 1850-76, imports increased at the rate of 1 to 6, while revenue only increased at the rate of 1 to 2.

(3) 1876 Onwards: *Reinforcement of Protective Policy*.—This inevitably led to a reaction against the so-called "free trade doctrinaires," marked by the passing of the law of 10 November, 1876, which laid it down that Customs duties should be paid in gold, a virtual addition of 33 per cent. to the tariff.² The progressive steps by which the policy of protection was enforced, were not only actuated by the need for securing revenue for the State Treasury but were also influenced by the Government's desire to protect home industries from foreign competition.³ The Minister Bunge initiated the period of high protective duties on 3 June, 1885, when the duties were raised 20 per cent., and the Customs income increased 10 per cent. Vishne-

¹ Drage, G., *op. cit.*, p. 226.

² Bloch, Jan, *Les finances de la Russie au XIX^e siècle. Historique et statistique*, Paris, 1899. Bloch tries to prove that his measure had an unfavourable effect, as had also other measures aiming at the import of gold from abroad, e.g., the issue of railway construction bonds. His study closes in 1883. (Russian edition not available in London.)

³ Russian industries grew up behind a high tariff wall. In 1853, the percentage relation of Customs duties to the value of the goods imported was 33 per cent.; under the influence of the tendency to free trade principles, it dropped to 13 per cent. in 1870; the renewal of the protectionist policy brought it up to 28.7 per cent. in 1890, and 32.5 per cent. in 1900.

gradsky continued the process by the addition of 20 per cent. to the tariff in 1891, and the establishing of protective duties on pig-iron, steel, and machinery. He was also responsible for the introduction of the bounty system for cotton export in 1892, with a view to conquering the Asiatic market, especially Persia. The culminating point was reached in Witte's dual system, by which he imposed special additional duties on the imports of such countries as declined to enter into a "most favoured nation" agreement with Russia. Duties levied on articles of luxury were raised in 1900, and a revision of the tariff in 1903 provided for (a) the protection of minerals, and (b) the taxation of some food-stuffs, including tea.

Although Customs duties showed a slight tendency to decrease in the years preceding the war, they still reached the figure of 30 per cent. of the value of the goods imported in the year 1912.¹ This was considerably above the rate of duty imposed by other countries on imports in that year.²

Foodstuffs were subject to heavier duties than were other classes of imports,³ these duties reaching 67 per cent. of the value of the food-stuffs imported in 1912. As regards the financial significance of the various classes of goods in the tariffs, the preponderating rôle was played by the import of tea.⁴ It alone yielded 15 per cent. of the total amount of customs duties in 1912.

In carrying out his dual system, Count Witte entered into trade agreements with quite a number of countries. The main interest, however, centres round the commercial treaties with Germany, in view of the growing importance of the share held by the latter country in Russia's foreign trade.⁵

¹ Appendix A, value of imports, and percentage relation of duties imposed on them to their value, 1905-12.

² Appendix B, rate of duties imposed by other countries in 1912.

³ Appendix C, Percentage of Customs duties to value for the separate classes of goods.

⁴ Appendix D, Yield of the tariffs on the various classes of goods.

⁵ The close economic contact between the countries can be seen from figures for the year 1910, as to the number of travellers crossing the European frontier, arranged according to their nationality. *Vide Foreign*

52 THE ECONOMIC DEVELOPMENT OF RUSSIA

The Russo-German Commercial Treaty of 1894 was preceded by a tariff war of great intensity between the two countries. Russia's main grievance was in connection with her corn export into Germany, for which she wished to be placed on a "most favoured nation" footing. Far from conceding this, Germany gave special advantages to the other European countries as against Russia.¹ America shared these advantages in virtue of her possession of a "most favoured nation" clause in her existing treaty with Germany, but Russia had to go on paying the higher scale of duties.

Germany's reasons for complaint were threefold: (a) excessively high duties on iron, chemicals, textiles, which reacted unfavourably on German industry; (b) differential tariffs on sea and land transport which encouraged English shipping to the detriment of German import over the Western land frontier; (c) uncertainty with regard to new increases.²

Trade on the European Frontier, official monthly publication of the Customs Department (R.), December 1910 issue.

	Left Russia.	Arrived in Russia.
Britain :		
Men	5,487	7,538
Women	3,529	4,558
Germany :		
Men	36,590	40,922
Women	22,767	26,261
Austria-Hungary :		
Men	55,577	58,513
Women	23,918	26,558
France :		
Men	7,276	8,129
Women	4,778	5,346

¹ For example, in 1891, she entered into agreements with Austria, Italy, Belgium, Switzerland, in 1892 with Serbia, Spain, Rumania, with the following reductions per quintal:

Wheat, from 5 marks, reduced to	3.50 marks
Oats " 4 " " "	2.80 " "
Barley " 4 " " "	2.25 " "

² The arbitrary power of fixing special rates for different countries had already been exercised by the Russian Minister of Finance in 1893 to raise the port dues for German goods from 5 kopeks to 1 rouble per 2 tons, to increase the transport rates, and to raise the Customs duties for German imports by 50 per cent.

Agreement was finally reached in the Treaty of 8-20 March, 1894.¹ Russia secured the coveted "most favoured nation" clause, and her corn was restored to its old position, only paying a duty of 3.50 marks per 100 kilograms. In return she diminished her rates on German raw and manufactured goods, and also abandoned her rights of fixing special transport rates, port dues, etc.,² for German goods, adopting the principle that all foreign goods should pay the same duties when crossing her frontiers.

It was generally admitted that in the conflict preceding the 1894 Treaty, Russia held the stronger position and secured the greater advantages. In Germany, the effects of the Treaty were held to be inimical to German agriculture.³ Conditions, however, had entirely altered by the time the Treaty fell to be renewed in 1904. Russia was in the throes of war and internal disturbances, and was therefore in no condition to take up a thorough defence of her own interests. Further, she was particularly anxious to secure the friendly neutrality of Germany so as to ensure the safe passage of the coal supplies for the Russian fleet, which had to be sent from the Baltic ports, round Europe and Africa to the Pacific. The increase of rates on grain imposed by Germany was considered to be very disadvantageous to the interests of Russian agriculture as a whole, not only to the large landowner, but to the small peasant holder as well.⁴ Low duties were imposed on the import of raw material from Russia into Germany, to the advantage of German industries, while prohibitive rates on worked up grain products discouraged that branch of industry within Russia. The higher duties imposed by Russia on German manufactures were not sufficient to check the constantly growing stream of imports.

¹ "Collection of Commercial Treaties drawn up between Russia and foreign countries." (In Russian and French.) Russian official edition 1913.

² Articles 10, 13, 15, 16, of the Treaty.

³ *Proceedings of the Duma*, 22 April, 1914 (R.), p. 847. In making a comparison between the 1894 and the 1904 Treaties, Mr. Shingarev refers to the speech of Baron Hamerstein in the Prussian Chamber, in which he likened the 1894 Treaty to a gravestone on which ought to have been written "Here lies German agriculture."

⁴ *Proceedings of the Duma*, 22 April, 1914 (R.), l.c. Also Herzenstein, 23 May, 1906, p. 577.

54 THE ECONOMIC DEVELOPMENT OF RUSSIA

The only change to be noted in the relations between the two countries during the period 1905-14, was the imposition of a duty of 30 kopeks per pood on grain imported into Russia through Germany over the Western frontier.¹ This was intended to discourage the ever-increasing import of rye from Germany, encouraged by a system of export premiums. By the law of 4 April, 1894, a minimum export of 500 kilos of grain entitled the exporters to receive an importing certificate. This was accepted in payment of the duty on the import of a corresponding amount of grain : later (1 June, 1906), the certificate was accepted not only for grain, but for coffee, herrings, cocoa, rice, kerosine, as well.²

The commercial relations between Great Britain and Russia were regulated by the Treaty of 1859. In virtue of the "most favoured nation" clause which it contained Britain profited by the special concessions granted to Germany and other countries.

¹ *Proceedings of the Duma*, 27 March, 1914, p. 261, speech of Rostovtsev.

² The increased export of rye from Germany to Russia, under this stimulus, was as follows :

Year.	1,000 poods.	Year.	1,000 poods.
1900	108	1910	6·437
1903	364	1911	6·959
1904	1·228	1913	14·000
1908	6·006		

CHAPTER IV.

FOREIGN TRADE.

EXPORTS.

RUSSIA'S export trade was based mainly on her export of grain, particularly wheat, which accounted on the average for 48 per cent. of her total export during the first decade of the twentieth century.¹ It is therefore of importance to know where and under what conditions her wheat surplus was produced.

For many years the Central provinces of Russia had been the main source from which the exportable surplus of wheat was drawn,² earning for themselves the title of "the granary of Europe." Since the crop failure of 1891, however, which was particularly severely felt in the Centre, its decline in importance has been increasingly marked. Reasons put forward were, lack of adequate rainfall, and insufficient methods of cultivation due partly to the communal system of landholding. At the same time, the Southern provinces showed a remarkable increase in productivity, and rapidly became the main wheat-producing area.³ These provinces, which also held the ascendancy as producers of coal and iron, were developing on entirely modern lines, mainly

¹ Appendix E, Value of Russia's exports 1905-13, in roubles, and as percentages of the total export. Appendices F and G, export of the five main cereals 1904-13, Export of grain and grain products 1909-13.

² Kondratiev, Prof. N. D., *The Corn Market* Moscow, 1922 (R.), pp. 5 and 6 for calculations of total output and home consumption, proving the existence of an exportable surplus, although based on a low level of domestic consumption.

³ *Exporting provinces*: Bessarabia, Don region, Ekaterinoslav, Penza, Podolia, Taurida, Ufa, Kherson, Kuban region, Stavropol. *Provinces producing mainly for domestic consumption*: Voronezh, Kiev, Kursk, Nizhni-Novgorod, Orel, Poltava, Riazan, Samara, Saratov, Tambov, Tula, Kharkov, Yaroslav, Terek region, Tomsk province.

56 THE ECONOMIC DEVELOPMENT OF RUSSIA

by the assistance of foreign capital and foreign enterprise.

The fact that she had to face the competition of the world market in the question of grain export was becoming of serious importance to Russia, in view of the fact that her grain surplus was produced under very unfavourable conditions compared to those which prevailed in the other main wheat-exporting countries. Russian agriculture was characterized by a very low average yield,¹ due partly to the system of land tenure, and partly to the deficient methods of agriculture in use.

There were two systems of land-holding in force in Russia, private and peasant, and both of these were undergoing profound modifications. At the Emancipation, the peasants received a certain allotment of land, together with their personal freedom. The size of the allotment varied in different parts of the country, but in the majority of cases proved to be too small for the actual needs of the peasant family, and the constant pressure to secure more land, mainly by purchases from the large land-owners, became increasingly acute. A further change was the gradual transition of the peasantry from the communal to the individual system of land-holding, particularly marked during the years of the twentieth century preceding the Great War. The owners of large estates who found themselves suddenly transformed by the Emancipation from feudal landlords to modern capitalist land-owners with enormous estates, were in most cases unprepared to meet the change, and carry out a system of large-scale agricultural production. The estates were slowly passing out of the hands of the nobility, either piecemeal into the possession of the peasantry, a process which was aided by the operations of the Peasants' Bank ; or else being trans-

¹ Rubinow, I. M., *Russia's Wheat Surplus*, op. cit., p. 26, Average yield of wheat per acre in the main wheat-producing countries of the world, in 1904 (Bushels) :

Russia.	U.S.A.	Britain.	Germany.	France.	Hungary.
11·4	12·5	27·7	29·4	18·6	16·3
Italy.	Rumania.	Spain.	Canada.	Argentine.	British India.
11·8	12·6	10·6	16·8	12·1	10·1

ferred intact into the hands of a new class of capitalist entrepreneur.¹

The agricultural methods in use showed many defects. Peasant farming was the most important factor in Russian agriculture, and it was conducted on very primitive lines. The average peasant was in a state of acute poverty, due in part to his unsatisfactory economic position after the Emancipation. This, combined with his ignorance and very low cultural level, gave little hope of up-to-date agricultural methods or machinery being used. The three-field system of cultivation was in general use—a field would be sown with a winter crop one year, a spring crop the second, and would lie fallow during the third. Improved methods, in the way of sowing of grasses and rotation of crops, were only very gradually being introduced. Fertilizers were made use of to a very small extent. Modern agricultural machinery was practically unknown, the primitive "sokha" being used instead of ploughs. Harvesting and thrashing were also carried out by means of primitive implements. The Zemstvos were endeavouring to promote the use of modern machinery and fertilizers, but their efforts were not sufficient, and much remained to be done. Communal ownership, which was only gradually being superseded by the individual system, was also an obstacle to agricultural progress, since each individual had to adopt the agricultural methods in force throughout the whole community.

The system of marketing and exporting the grain produced under these unfavourable conditions was also subject to many drawbacks. A considerable number of middlemen stood between the Russian producer and the foreign consumer, and their various charges all served to heighten the price of Russian grain when it appeared on foreign markets.²

The peasant was forced to carry his grain to market practically as soon as it was harvested, since he was in need of ready money to pay his taxes, and could not

¹ *Vide* Section on "Banking," the Nobles' Bank and the Peasants' Bank.

² *Russia's Wheat Trade*, Rubinow, I. M. U.S. Dept. of Agriculture, Bureau of Statistics, Bulletin 65, Washington 1908.

afford to wait. He therefore transported his grain to the local market, and disposed of it to the local dealer, who was often the agent of a firm of grain dealers in some distant city. Since the average peasant was quite illiterate, he was not in a position to study the newspapers and become conversant with grain prices on the international market. He was therefore at the mercy of the local dealer as far as price was concerned. A small number of peasants, especially those living in the neighbourhood of large towns, were beginning to acquire an understanding of market conditions, but such knowledge was never met with in the more remote country districts. The grain was next despatched by the local dealer, by rail or barge, either to a larger local dealer, and thence to the grain firm in the city, or direct to the latter. It was finally passed on to the exporting firm, who shipped it to the foreign house which had purchased it.

Fewer intermediate steps were found to be necessary when grain was sold privately by the large estate owner. He usually sent it direct to the firm in the city or to the exporting house, and had a much better knowledge of general market conditions than had the peasant seller.

Considerable impetus had been given to the construction of elevators in the '90's of last century,¹ since it was believed that their existence would confer great benefits on the grain trade. When these expected benefits were not immediately realized, the primary enthusiasm waned, and construction proceeded much more slowly. Consequently Russia possessed very few elevators in comparison with the needs of her grain trade. Hence there was no uniform system of cleaning and grading the grain, bringing a corresponding decline in its quality, and engendering complaints of impurities among foreign buyers. Further storage facilities, which would have been provided by a sufficient number of elevators, were inadequate, especially on the realization of

¹ The first elevator was built at Eletsk in 1888 by the local Zemstvo, and had a capacity of 240,000 bushels of wheat. By 1 January, 1900, there were 62 elevators, with a total capacity of 11,200,000 bushels, and 198 warehouses with a combined capacity of 14,300,000 bushels. Rubinow, *Russia's Wheat Trade*, op. cit.

the harvest, when grain freights were often too great for the railways to cope with at once. Finally, elevators at the principal ports would have immensely facilitated the work of loading. Much time was lost in the cumbrous and laborious methods of transferring grain from the railway wagons to the ships by means of hand labour.¹

In considering the export of wheat by frontier it is to be noted that by far the largest share fell to the lot of the southern ports on the Black Sea and the Sea of Azov—Odessa, Nikolaev, Rostov, Kherson, Mariupol, Berdiansk—since the greater part of the wheat supplies were grown in a region for which these ports were the natural outlet.² Ports in these regions handled no less than 90 per cent. of the total wheat export in the period 1900–4. The export of Siberian wheat passed northwards through Archangel but formed an insignificant part of the total.

As regards exports other than grain, those of dairy produce and other food-stuffs, e.g. poultry, from Siberia, showed a rapid increase. In the period 1904–8, the average yearly export of these products was valued at 131.8 million roubles; in the period 1909–13, it had risen to 206.2 million roubles.³ This section of export, i.e. cereals and other food-stuffs, accounted for 54.7 per cent. of Russia's total export trade in 1914.

¹ Russia's difficulty in keeping up with countries in which more scientific methods were employed, is seen from the following figures, showing that although her export of grain increased greatly in amount, there was no corresponding rise in the price obtained for it. *Proceedings of the Duma (R.)*, Feb. 1911, p. 2363.

Year.	Amount of Export (million poods).	Increase or decrease.	Value of Export (million roubles).	Increase or decrease.
1909.	760		748	
1910.	847	+86	746	-2.3

Russia's share as a supplier of the world market also showed a tendency to diminish; *Ibid*, 22 April, 1914, p. 816. Mr. Bark.

Year.	Share of Russia in import to chief consuming countries.				
1908–12	24.5%
1912	17.5%
1913	17.0%

² Appendix H, Export of grain across the various frontiers, and through the various ports.

³ Appendix I, Statistics of food-stuffs other than cereals exported 1909–

60 THE ECONOMIC DEVELOPMENT OF RUSSIA

The second place in importance was occupied by what was known as "raw material and half-manufactured goods" in the official Customs classification. These accounted for 36.5 per cent. of the total export in 1914, leaving less than 8 per cent. for the remaining categories of "animal products" and "manufactures."

Other agricultural exports not already mentioned were seeds, horsehair, feathers and down, wool, bristles, flax, hemp, hides. The total value of the export of these in 1913 was 270 million roubles. The price obtained for flax seeds was largely influenced by the extent of the export from the Argentine. The latter being particularly great in 1913, Russia's export to Great Britain and Germany showed a considerable decline.¹

The export of timber and timber materials increased from an average yearly value of 93 million roubles in 1904-8 to 144.4 million roubles in 1909-13. The value of the export in 1913 was 163 million roubles.

Under the heading of iron products exported are found cement, asbestos, coal and coke, iron ore, manganese ore, pig-iron, wrought-iron, rails, platinum, naphtha, and naphtha products. These showed considerable increase, mainly due to the development of the naphtha industry.²

The export of manufactures across the European and Finnish frontiers was very insignificant, accounting for only about £4 million in 1913. These manufactures comprised, earthenware, glass manufactures, metal manufactures, carpentry work, rubber footwear and other rubber goods, manufactures from flax and hemp, wool, cotton. The export across these frontiers remained comparatively stationary, being 26.2 million roubles in 1904-8, and 26.9 million roubles in 1909-13. Trade across the Asiatic

¹ *Messenger of Finance*, No. 8, 1914, also No. 9, 1914 (R.), p. 381, *Russia's Foreign Trade in 1913*.

² The value of exports in this section was as follows :

Year.	1,000 roubles.
1909.	66,876
1910.	62,187
	64,046
	73,974
	84,937

frontier, on the other hand, showed rapid and constant increase, due to the growth in the export of cotton goods.¹

IMPORTS.

For some years prior to the War, the constant growth of imports, coupled with the almost stationary condition of exports, and the consequent diminution of the trade balance, had been the topic of considerable comment and discussion within the country. Since the trade balance was held to be a basic factor in the economic structure of the country, the serious nature of the situation will be obvious. If we take the totals of exports and imports from the tables quoted in the Appendices, and the surplus of the first over the second, i.e., the trade balance, we have the following results :

Year.	Total Export.	Total Import.	Balance.
In Million Roubles.			
1910 . . .	1,383·6	953·0	430·6
1911 . . .	1,514·0	1,022·6	491·4
1912 . . .	1,428·1	1,036·7	391·4
1913 . . .	1,420·8	1,225·5	195·3

The main part in this enormous growth of imports was taken by the increase in the import of raw material and manufactured goods.² Two-thirds of the increase in imported manufactures fell to the share of Germany, who took advantage of the slow development of Russian industry to greatly increase her import into the country. This is made clear by figures referring to the trade between the two countries :

¹ In 1913 cotton goods to the value of 40·9 million roubles were exported, as compared with 35·7 million roubles in 1912. As compared with 1909, the export had doubled itself.

² In the period 1904-8 the average yearly increase in the import of raw material was 45 million roubles or 15 per cent ; from 1909-13, it rose to 160 million roubles, or 45 per cent. With regard to manufactures, the relevant figures were : 1904-8, 5 per cent. increase ; 1909-13, 92 per cent. increase. *Proceedings of the Duma*, 25 April, 1914 (R.), p. 1015, Speech of Mr. Demchenko.

Year.	Russian Import into Germany (Million Roubles).	German Import into Russia (Million Roubles).
1909	387	355
1913	453	643
	Increase 18 per cent.	Increase 81 per cent.

From one point of view the increase of imports was a satisfactory sign of increasing power of consumption on the home market.¹ On the other hand, complaints were made that Russia imported a great deal from abroad which she could very well obtain within her own territory if greater care and attention were paid to the development and proper exploitation of home resources.² It was pointed out, for example, that the possibilities of the vast steppes of Russia as wool-producing areas were not sufficiently exploited. Further, the increasing import of fruit, berries, etc., was condemned in view of the richness of Central and Southern Russia in these commodities.

Among the various classes of imports, manufactured goods played an important part,³ accounting for 33 per cent. of Russia's total import in 1914. They showed a constant tendency to increase, in spite of the growth of home industry.⁴

The increase in the import of mineral fuel, metals and metal manufactures was very striking,⁵ rising in value from 159.8 million roubles in 1909, to 284.9 million roubles in 1913. These included coal, coke, pig-iron, wrought-iron, steel, copper, nickel, tin, lead, zinc, wire manufactures, machinery, musical instruments, automobiles. Although the mining industry within the country was making rapid strides, the

¹ Appendix J, Percentage increase in the import across the European frontier of several important commodities in 1913, as compared with 1912.

² *Proceedings of the Duma*, 26 April, 1914 (R.), p. 1146, Mr. Titov.

³ Appendix K, Imports into Russia in roubles, and as percentages of total imports.

⁴ E.g., the import of cotton, jute, silk, wool, as raw material, and as half-manufactured articles, increased in value from 199.6 million roubles in 1907, to 283.3 million roubles in 1913.

⁵ Relevant figures are:

Year.	Import in Million Roubles.	Year.	Import in Million Roubles
1909	159.8	1912	246.2
1910	196.8	1913	284.9
1911	241.2		

increase in the import of coal and coke continued to grow apace.¹

Apart from cereals, the great bulk of which entered Russia over the Western frontier from Germany, the most important food-stuffs imported were Eastern or tropical products, including oranges and pomegranates, lemons, nuts, spices, coffee, cocoa, tea. The importance of tea has already been noted in connection with the Customs income derived from it. Herrings were also imported in considerable quantities, Scotland being one of the sources of supply.

Among the imports of animal products, including manures, tallow, skins and hides, special interest attaches to the former, as being an indication of improving agricultural conditions within the country.²

Figures showing the export from, and import into, Russia, arranged according to the countries receiving and supplying same,³ show that Britain and Germany were easily the most important factors in Russia's foreign trade. As regards both export and import, Germany headed the list, with Britain a relatively poor second. Although export into Germany showed a decline from 1911 onwards, as did the corresponding figures for Britain, it did so at a lesser rate.

A great deal has been written about the increasing share of Russian trade secured by Germany as compared with Britain.⁴ Apart from the fact of geographical proximity, the causes of this were held to be the superior organization

¹ The average annual import of coal for 1908-12 was 267 million poods, as against 211 million poods in 1903-7. The corresponding figures for coke were 33 million poods as compared with 30 million poods.

² The relevant figures are:

Year.	Amount of Manures Imported in Million Poods.									
1904	0.2
1907	7.3
1910	17.0
1912	26.7

Vide Vol. I, No. 4 (July-September 1921) of the *Russian Economist*, for statistics on the post-war scarcity of manures, and the consequent deterioration of the soil.

³ Appendix L for detailed figures 1909-13.

⁴ Raffalovich, A., *Russia: its Trade and Commerce*, London, 1918, p. 313 et seq. Drage, G., *Russian Affairs*, p. 231 et seq., also p. 247. *The Times Book of Russia: Finance, Commerce, Industries*, London, 1916, Introduction. Barrett, R. J., *Russia's New Era*, London, 1908, Chap. IV, p. 64, "Russian Trade Openings," also p. 210.

of German trading, the fact that German commercial men studied the language, customs, desires, and needs of their customers, to a much greater extent than did their English colleagues. They also practised a much more elastic credit system, which was a point of the utmost importance in an agricultural country like Russia, where long credits were an absolute necessity of economic life.¹ German methods of "peaceful penetration" had also secured for her a very favourable position in Russian industry before the War.

It is impossible to dispute the broad facts of German superiority in the competition for trade with Russia between Britain and Germany. One or two modifying factors of minor importance may, however, be considered, since they have not received general recognition.

Britain possessed rival sources of supply which were not open to Germany to the same extent, and she had not, therefore, the same stimulus to increase her trade with Russia. The Argentine was an increasing source of wheat supply: ² further, the varied and constantly growing resources of a world-wide Empire were at her disposal. Germany's importance as a transit country must be taken into account in estimating her position with regard to trade with Russia. According to the Russian system, the country forwarding the goods is given as the country of origin, but this is misleading in the case, for instance, of figs, almonds, etc., put down as imports from Germany, although obviously not produced there. Further, the class of goods provided by Germany differed considerably from the British.³ The

¹ Appendix M, Extract from Consular Report for Kharkov, year 1911, stressing the importance of long credits.

² *Messenger of Finance*, No. 4, 1914 (R.), p. 154, "Supply of wheat to Great Britain." Relative positions of the chief supplying countries in the six years preceding the War:

U.S.A.	23.5 per cent.
Argentine	18.0
Canada	17.0
India	
Russia	13.0
Australia and New Zealand	9.6
Others	

³ No. 4801, Annual Series, Diplomatic and Consular Reports, Report for the Year 1910 on the foreign commerce of Russia and trade of the Consular district of St. Petersburg. (Cd. 5465-194.)

former included toys, Christmas tree decorations, boxes, etc., etc., anything cheap and calculated to find a ready sale. The British product was on the whole preferred when first-class materials and workmanship were essential. These facts do not, however, obscure the main issue, that German methods of trading had secured her a position of superiority in trade with Russia at our expense.

APPENDIX.
THE TRADE BALANCE.

TABLE A.
General Review for 1912.

Year.	Export.	Import.	Turnover	Balance.	Customs.	Equivalent of balance in Sterling. ¹
(In Million Roubles.)						
1902-6 .	1,008·0	673·6	1,681·6	334·4	236·2	£33,440,000
1907-11 .	1,303·9	982·5	2,286·4	321·4	298·6	32,140,000
1911 . .	1,591·4	1,161·7	2,753·1	429·7	336·8	42,970,000
1912 . .	1,518·8	1,171·8	2,690·6	347·0	336·0	34,700,000
<i>General Review for 1913 (p. v.).</i>						
1913 . .	1,520·1	1,374·0	2,894·1	146·1	377	14,610,000
<i>General Review for 1915 (p. iv.).</i>						
1914 . .	956·1	1,098·0	2,054·1	141·9	—	14,190,000
1915 . .	401·8	1,138·6	1,540·4	736·8	—	73,680,000
<i>General Review for 1915 (cont.).</i>						
1894-8 .	701·2	568·5	1,269·7	132·7	—	13,270,000
1899-1903	793·3	630·2	1,423·5	163·1	—	16,310,000
1904-8 .	1046·0	769·5	1,815·5	276·5	—	27,650,000

¹ Taking £1 = 10 roubles. Before the Great War, 1 rouble = 2s.

TABLE B.

Comparison between figures on the trade balance taken from the *General Review*, and those from the *Russian Money Market*, 1908-12.

	Year.	Exports.	Imports.	Balance.
(In Million Roubles.)				
<i>General Review</i> . . .	1909	1,426.4	903.2	523.2
<i>Money Market</i> . . .	—	1,427.7	906.3	521.4
Difference	—	1.3	3.1	1.8 = £180,000
<i>General Review</i> . . .	1910	1,448.8	1,085.3	363.5
<i>Money Market</i> . . .	—	1,449.1	1,084.4	364.7
Difference	—	0.3	0.9	1.2 = £120,000
<i>General Review</i> . . .	1911	1,524.0	1,176.8	347.2
<i>Money Market</i> . . .	—	1,591.4	1,161.7	429.7
Difference	—	67.4	15.1	82.5 = £8,250,000
<i>General Review</i> . . .	1912	1,457.3	1,162.7	294.6
<i>Money Market</i> . . .	—	1,518.8	1,171.8	347.0
Difference	—	61.5	9.1	52.4 = £5,240,000

Note the considerable discrepancies for the years 1911 and 1912.

TABLE C.

The "market prices" are calculated as follows: for wheat, the prices of Odessa, Nikolayev, Rostov, Novorossisk, are taken; for rye, the same, with the addition of Petrograd and Liban; for barley, the same as for wheat; for oats, Petrograd, Riga, and Liban. The London prices are taken from the *Economist*.

Cost of wheat, rye, barley, oats, maize, exported from Russia 1890-7, according to the Market and Customs prices.

Year.	Market Cost.	Cost according to Customs Valuation.	Difference.	Equivalent of Column 3 in Sterling.	Connection between Customs Valuation for Corn Export and Market Value as Percentage.
(1,000 Metal Roubles.)					
1890	213,617	229,221	+ 15,604	+ £1,560,400	107.3
1891	231,607	219,466	- 12,141	- 1,214,100	94.8
1892	88,560	92,202	+ 3,642	+ 364,200	104.1
1893	161,353	175,069	+ 13,716	+ 1,371,600	108.5
1894	201,192	231,911	+ 30,719	+ 3,071,900	115.3
1895	201,482	204,932	+ 3,450	+ 345,000	101.2
1896	195,820	194,982	- 838	- 83,800	99.6
1897	212,961	213,625	+ 664	+ 66,400	100.3

Customs Valuation of Wheat, compared with Market and London Prices, for the years 1890-7.

Year.	Cost of 1 pood (36 lbs.) of Wheat in Metal Koeps.		Difference in Metal Koeps.	Equivalent in Pence.	Customs Price expressed as percentage of Market.	Price of 1 pood of Local Corn on London Market in Metal Koeps	Equivalent of Column 4 in pence.	Difference between Customs and London Prices in Metal Koeps.
	Cus-toms.	Mar-ket.						
1890	71.5	64.9	+6.6	+1.7	110.2	72.7	18.2	— 1.2
1891	70.5	72.1	-1.6	-0.4	97.8	83.5	20.9	— 13.0
1892	60.4	58.7	+1.7	+0.4	102.9	68.3	17.1	— 7.9
1893	56.7	49.7	+7.7	+1.8	114.1	59.9	15.0	— 3.2
1894	46.7	39.1	+7.6	+1.9	119.5	52.2	13.1	— 5.5
1895	43.9	43.9	0	0	100.0	52.4	13.1	— 8.5
1896	49.8	51.3	-1.5	-0.3	97.1	59.2	14.8	— 9.4
1897	61.6	62.1	-0.5	-0.1	99.2	71.5	17.9	— 9.9

TABLE D.

Pokrovsky, V. S. *Collection of Information*, etc. (R.) Introduction p. 7. The figures refer to fifty governments only.

Average of a good harvest = 347 million chetverts,¹ c. 48 million tons, exports, = 16 per cent.

Average of a bad harvest = 265 million chetverts, c. 37 million tons, exports, = 14 per cent.

Average export per head = 0.60 chetverts = 5.2 poods, 1.7 cwt., in 1895-6 and 1896-7.

In the '70's there remained for home consumption 2.2 chetverts per head (6.1 cwt.).

In '80's and beginning of '90's, home consumption 1.9 chetverts per head (5.3 cwt.), *i.e.*, 14 per cent. less.

In 1897, home consumption 1.6 chetverts per head (4.5 cwt.), *i.e.*, only 0.14 of a chetvert, *i.e.*, 1½ lb., higher than the amount for home consumption in the year of scarcity 1891-2.

¹ One chetvert : | poods.

TRADE.

TABLE A.

Messenger of Finance, No. 10, 1914 (R.), p. 455: "Absolute and relative degrees of Customs duties in Russia."

Value of Imports and Percentage Relation of Duties imposed on them to their Value, 1905-12.

Year.	Value of Import.	Amount of Duty.	Percentage Relation of Duty to Value.
In Million Roubles.			
1905 . .	531·6	203·3	38
1906 . .	589·8	222·9	37
1907 . .	671·1	234·6	35
1908 . .	731·0	252·9	34
1909 . .	752·4	244·6	33
1910 . .	915·2	279·4	31
1911 . .	982·4	297·4	30
1912 . .	994·1	295·1	30

TABLE B.

Raffalovich, A., *Russia*, etc., p. 308.

Rate of Duties imposed by other Countries in 1912.

Name of Country.	Percentage Relation of Duty to Value of Import.
Great Britain	5·7
Austria-Hungary	7·5
Germany . .	8·4
France . . .	8·2
Italy	9·8
U.S.A. . . .	18·5

TABLE C.

Messenger of Finance, No. 10, 1914 (R.). Goods subject to Customs duties were divided into the four sections of (1) Food-stuffs ("zhizneniye pripasi"), articles 1-70 on the tariff list; (2) Raw materials and half-manufactured goods ("syriye i polu-obrabotaniye materialy"), articles 71-200; (3) Animal products ("zhivotniye produkty"), articles 201-8; (4) Manufactured goods ("izdelyiya"), articles 209-86.

Percentage of Customs Duties to Value for the separate Classes of Goods.

Years.	Food-stuffs.	Raw Material and half-manufactured.	Manufactures.	All three.
1904 . .	90	28	26	37
1905 . .	95	27	25	38
1906 . .	90	25	29	38
1907 . .	75	25	29	35
1908 . .	69	27	29	35
1909 . .	75	24	26	33
1910 . .	77	22	26	30
1911 . .	69	23	26	30
1912 . .	67	22	27	30

TABLE D.

Ibid. Financial Significance of various classes of Goods in the Tariffs.

	In Million Roubles.	As percentage to general Total of Duties.
Tea of every kind	44.4	15.0
Raw cotton	35.4	12.0
Machines and parts	31.5	10.6
Herrings salted and smoked	11.4	3.9
Unworked metals	11.0	3.7
Wool and down unworked . .	6.3	2.2
Woollen manufactures . . .	5.9	2.0
Coal and coke	5.8	2.0
Chemicals	5.8	2.0
Oranges, lemons	5.6	1.9
Iron and steel manufactures	5.3	1.8
Combed wool	5.3	1.8

72 THE ECONOMIC DEVELOPMENT OF RUSSIA

TABLE E.

Figures for 1905-10 taken from a publication of the Customs Dept. edited monthly, *Foreign Trade on the European Frontier* (R.); figures 1911-13 from the *Messenger of Finance*, No. 8, 1914, p. 342, article by A. Lomakin, "The foreign trade of Russia in 1913." A comparison between Lomakin's figures for export for the years prior to 1911, and those given in the Customs publication, shows agreement in columns 2 and 4, but divergence in the others.

Year.	Value of Export in 1,000 Roubles.				
	Food-stuffs.	Raw Material and Half-manufactured Goods.	Animal Products.	Manufactured Goods.	Total.
	1.	2.	3.	4.	5.
1905 .	685,032	292,241	15,727	24,875	1,017,875
1906 .	597,474	346,010	27,250	31,137	1,001,871
1907 .	559,962	383,613	22,745	25,205	991,525
1908 .	517,944	370,719	23,386	26,720	938,769
1909 .	900,326	416,276	25,044	24,727	1,366,373
1910 .	901,080	430,218	28,948	23,412	1,383,658
1911 .	988,700	473,600	25,800	25,900	1,514,000
1912 .	789,300	578,800	30,100	29,900	1,428,100
1913 .	807,200	550,200	33,000	30,400	1,420,800

The same figures as percentages of the total export, 1904-14. *Review of Foreign Trade along the European and Asiatic Frontiers* (R.). Customs publication edited yearly. 1915 edition.

Export.	1904-8.	1909-13.	1913.	1914.
1. Food-stuffs	59.9	60.5	55.2	54.7
2. Raw material and half-manufactured goods	33.0	33.2	36.9	36.5
3. Animal products	1.7	1.8	2.3	1.5
4. Manufactures	5.4	4.5	5.6	7.3
	100.0	100.0	100.0	100.0

TABLE F.

Foreign Trade, etc. Monthly Customs publication, op. cit., for figures 1904-10, p. 4. Figures 1910-13 from *Messenger of Finance*, No. 8, 1914, p. 341 (both R.).

Year.	Export of Wheat, Rye, Barley, Oats, Maize. In Million Poods.					
1904	658
1905	561
1906	429
1907						
1908						519
1909						769
1910						847
1911						821
1912						548
1913						647

TABLE G.

Messenger of Finance, No. 8, 1914 (R.).

	Export of Grain and Grain Products in Million Roubles.				
	1909.	1910.	1911.	1912.	1913.
Wheat	384.2	405.2	258.7	192.2	225.1
Rye	34.1	29.9	42.6	29.0	32.9
Barley	165.9	58.4	214.6	152.9	186.1
Oats	61.8	63.7	73.2	51.8	31.8
Maize	31.1	19.2	57.5	37.8	25.1
Peas	10.4	12.9	20.7	17.7	19.2
Beans and lentils	11.4	10.5	9.9	8.2	8.3
Wheaten flour	10.5	11.5	9.7	7.8	14.2
Rye flour	7.7	5.7	9.7	6.5	7.1
Bran	26.5	24.5	31.5	36.3	32.6

TABLE H.

Rubinow, I. M., *Russia's Wheat Trade*, Washington, 1908.

Distribution of the Grain Export by Frontiers, 1900-4.

Frontier.	Percentage of total Export.
Black Sea, European	49.98
" " Caucasian	6.20
Sea of Azov	34.21
Prussian	1.39
Austrian	1.25
Baltic	5.41
All others	1.56
	100.00

Der Handelshafen Odessa, Dr. O. Friebel, Berlin, 1921.
Published by the "Osteuropa Institut in Breslau." P. 95.

Grain Export of Russia and the Principal Ports.

	1909.	1912. In Million Poods.	1914.
Odessa	55.1	47.3	25.6
Nikolaev	100.9	59.0	35.8
Kherson	44.5	27.9	18.4
Rostov	95.3	55.0	61.0
Novorossisk	69.8	40.9	57.4
Petersburg	38.0	15.2	11.7
Whole of Russia	706.7	485.4	335.5
The same in Percentages.			
Odessa	7.8	9.74	7.63
Nikolaev	14.29	12.16	10.68
Kherson	6.29	5.74	5.47
Rostov	13.49	11.34	18.17
Novorossisk	9.87	8.73	17.10
Petersburg	5.38	3.13	3.51

TABLE I.

Messenger of Finance, No. 8, 1914 (R.).

Food-stuffs other than Cereals exported 1909-13.

Name of Commodity.	Value of Export in 1,000 Roubles.				
	1909.	1910.	1911.	1912.	1913.
Eggs	62,212	63,690	80,757	84,661	90,639
Butter	48,401	50,883	40,862	68,074	71,159
Sugar :					
European frontier .	15,338	8,463	48,260	36,383	6,198
Asiatic " .	12,895	17,466	18,027	20,285	20,450
Tobacco in leaves . .	2,298	3,316	4,243	4,632	6,544
Meat	3,089	5,233	5,908	8,378	9,398
Poultry	5,179	6,149	6,830	5,547	7,041
Spirits and corn brandy	4,623	4,960	6,654	8,339	4,630

TABLE J.

Proceedings of the Duma, 26 April, 1914, p. 1146, Mr. Titov.

Increase in the Import across the European Frontier of several important Commodities in 1913 as compared with 1912.

Commodity.	Increase per cent.
Food-stuffs	16.3
Raw material and half-manufactured goods .	16.1
Manufactures	20.6
Animals	20.0
Machinery	16.0
Skins	36.0
Wool	61.0
Cotton	22.0
Coal	63.0

TABLE K.

Russia's imports 1905-13. Figures 1905-10 taken from the monthly Customs publication, *Foreign Trade on the European Frontier*, p. 5; figures 1911-13, from *Messenger of Finance*, No. 8, 1914, p. 342 (both R.).

Year.	Value of Imports in 1,000 Roubles.				
	Food-stuffs.	Raw Material and Half-manufactured Goods.	Animal Products.	Manufactured Goods.	Total.
1905 .	92,790	307,102	1,055	158,368	559,315
1906 .	105,771	337,838	975	179,860	624,444
1907 .	119,087	375,909	1,073	205,444	701,513
1908 .	126,304	410,907	1,480	221,743	760,434
1909 .	116,810	411,137	1,553	256,413	785,913
1910 .	121,403	516,381	3,070	312,204	953,058
1911 .	134,100	517,000	3,500	368,000	1,022,600
1912 .	140,200	517,700	2,600	376,200	1,036,700
1913 .	163,000	600,900	3,100	458,500	1,225,500

The same as Percentages of total Import.

	1904-8.	1909-13.	1913.	1914.
1. Food-stuffs	22·6	18·1	17·3	18·1
2. Raw material and half-manufactured goods	48·8	48·7	48·6	47·4
3. Animal products. . . .	0·7	1·0	1·3	1·2
4. Manufactures	27·9	32·2	32·8	33·3
	100·0	100·0	100·0	100·0

TABLE L.

Messenger of Finance, No. 8, 1914, p. 344 (R.).

Export from Russia according to Country to which Goods sent.

Name of Country.	Export in Million Roubles.				
	1909.	1910.	1911.	1912.	1913.
Germany	387.0	390.5	490.5	453.8	452.6
Great Britain	288.7	315.0	336.6	327.5	266.9
Holland	189.2	196.0	188.8	154.0	177.5
France	89.1	93.6	90.8	98.0	100.9
Italy	67.8	75.2	52.7	52.5	73.7
Austria-Hungary	60.9	49.7	67.9	73.4	65.3
Belgium	64.4	66.5	55.4	58.9	64.6
Denmark	36.7	26.5	35.6	38.1	35.8
Turkey	26.2	26.6	32.4	28.8	34.5
Rumania	15.8	15.0	29.7	20.3	21.7
U.S.A.	11.5	9.5	13.5	18.0	14.2
Sweden	11.0	8.9	8.9	10.3	11.4
Spain	4.5	7.0	4.6	2.8	8.9
Egypt	3.1	3.3	3.2	5.3	8.6
Norway	8.1	6.2	10.0	4.8	6.7
Finland	51.8	42.8	53.7	49.6	55.3

Import into Russia according to Country from which Goods sent.

Name of Country.	Import in Million Roubles.				
	1909.	1910.	1911.	1912.	1913.
Germany	354.8	441.0	476.8	521.1	642.8
Great Britain	128.0	153.5	153.9	139.3	170.4
U.S.A.	57.9	73.9	100.8	85.7	74.2
France	49.0	59.4	56.2	55.2	56.0
Austria-Hungary	26.9	34.1	33.8	32.1	34.7
East Indies	14.0	17.8	24.4	25.7	30.0
Holland	18.1	19.3	17.5	19.1	21.5
Turkey	8.3	10.1	9.5	15.5	16.9
Italy	12.0	16.9	17.5	15.6	16.7
Sweden	7.9	7.7	9.8	10.7	16.1
China	13.9	12.4	12.3	13.8	15.3
Denmark	8.3	7.7	7.7	6.4	12.8
Norway	8.5	6.5	8.8	10.3	9.9
Belgium	6.7	6.9	6.6	7.3	8.6
Egypt	10.0	10.1	7.8	3.1	5.9
Spain	1.3	0.4	1.9	2.4	5.7
Switzerland	4.6	7.7	7.2	3.2	5.6
Finland	33.0	36.0	40.0	42.7	51.0

TABLE M.

Comparison between British and German methods in trade with Russia.

In the Consular Reports, submitted by British representatives in Russia, there are frequent allusions to the contrast between German and British methods of conducting business in that country. The constantly repeated warning is that German firms understand the country, are willing to give long credit, which is essential in an agricultural country, where the movements of the money market are regulated by the harvests, and that they take the trouble to find out exactly what goods their customers require. British firms, on the other hand, are conservative in the matter of credit, and often do not trouble to supply exactly the kind of article needed, hence inevitably losing a great deal of trade. A good general survey of the situation is to be found in the *Report for Kharkov*, Year 1911, where it is stated that the British manufacturers are generally far too conservative in the matter of credit, mainly because they have not studied the principles on which their Continental rivals do business. It goes on to point out that if the giving of credit is in the hands of experienced sales' managers, and kept under proper control, such outstanding accounts are regarded on the Continent as a very excellent asset, little below fluid capital in value. Without trade, manufacturing plant becomes dead capital, whereas when business is done as above, the outstanding debts are returned within a reasonable time, and carry from 5 to 6 per cent. interest. And when the manufacturer has not sufficient capital to finance the trade, Continental Banks or their London branches are very willing to advance the money to firms of good standing for the support of this credit. It is not unusual for such credit to be given on open accounts as overdrafts. More often, however, customers' six months promissory notes, with the manufacturers' endorsement, are taken as a guarantee, these notes being renewable at six-monthly intervals up to the termination of the sales' credit, say in 18 to 30 months. Hence trade is extended without extra capital, higher prices are taken than is possible with cash payments, and additional profit is made on the difference between the interest charged to the customer, and the Bank rate. The conclusion is that British bankers and manufacturers will have to adopt Continental methods of giving support to the export trade by means of credit, or they will be ousted therefrom by their foreign competitors. •

Part III.
FINANCE.

CHAPTER V.

BANKING.

PRIOR to 1860, the main banking operations, i.e., the advancing of loans on various kinds of securities, the mortgaging of real property, etc., were in the hands of the old Government banks. The latter were abolished in 1860,¹ and the State Bank of Russia was founded to take over their activities. The following list ² shows the main credit institutions in the country, in the groups to which they belong, and the date of the passing of the Statutes under which they were established.

I. State Credit Institutions.

1. The Sinking Fund Commission (1817).
2. The State Bank, with its branches, sections, and agents (31 May, 1860; 6 June, 1894).
3. State Savings Banks (16 October, 1862; 1 June, 1895.)
4. The Nobles' Land Bank (3 June, 1885; 12 June, 1890).
5. Peasants' Land Bank (1883, 1895).
6. Banks for lending on securities ("sudniya kazny") (1838, 1862, 1895).
7. Zemstvo and Urban Credit Bank (26 June, 1912).

In addition to these, some of the duties of State Credit Institutions were carried out by two departments: the Special Chancery for Credit, of the Ministry of Finance; and the Department of Direct Taxation, with regard to the redemption of land.

¹ Raffalovich, A., *Russia*, etc., p. 379.

² "Credit Statute" in the *Svod Zakonov* (Code of Laws), Vol. XI, Part II (R.).

II. Social Credit Institutions.

1. Municipal Social Banks (1862, 1912).
2. Village Social Banks.
3. Municipal Loan Offices ("Lombardy").
4. Banks and Credit Societies of the various class corporations, Merchants, Nobles, and so forth.
5. Petty Credit Institutions.¹

III. Private Banks.

1. Joint Stock Commercial Banks (discounting, lending, merchants', commercial and industrial, etc.) (1872).
2. Societies for Mutual Credit.
3. Joint Stock Agrarian Banks.
4. Banks and Societies for Agrarian Credit, based upon the joint responsibility of the borrowers.
5. Municipal Credit Societies (26 April, 1883, and 13 January, 1912).
6. Private Loan Offices, and Associations for lending money on the security of movable property or merchandise (1838).
7. Credit and Savings Associations.
8. Bankers and Money-changers (June, 1894).

Group I. State Credit Institutions.

Among the above, a more detailed survey will be made of the four most important establishments, namely, the State Bank, the Savings Banks, the Nobles' Land Bank, and the Peasants' Land Bank. Since the operations of these institutions were intimately bound up with the whole economic life of the country, they are a reliable indicator as to the various social developments which were in progress.

The State Bank of Russia was constituted under the Statute of 31 May, 1860,² after the liquidation in that year of the earlier State Credit establishments, namely, the Loan Bank, founded in 1754; the Deposit Banks, founded in 1772; and the Boards of Public Charity ("Prikazy Obshchest-

¹ A term used since 7 June, 1904, to cover different types of mainly rural credit institutions. Article 87 of the *Ustav Kreditny*.

² For a history of the State Bank, *vide* Steinberg, Paul, *Die russische Staatsbank seit der Währungsreform* (1897-1910). Stuttgart, Berlin, 1914.

vennavo Prichenya"), founded in 1775.¹ The duty of liquidating the liabilities of these institutions was imposed upon the State Bank, and for a time prevented it from engaging to any great extent in commercial credit operations. Only after the currency reform of 1897 did it become a bank of issue in the proper sense of the term, since before that date, it had possessed no right of emission, and assumed no responsibility as to the notes issued.

The revised Statute of 1894 still further emphasized the fact that the Bank was a State Institution, Article 24 stating that, "the State Bank is directly subordinated to the Ministry of Finance." The aims of the Bank, as set forth in Article 1 of its Statute, show that it was an institution designed to further the general economic welfare of the country. These aims were as follows: to facilitate the circulation of currency; to assist home commerce, industry, and agriculture, by short-term loans; and to safeguard the monetary system. It will readily be seen that in gaining control of an institution with such powers and aims, the Ministry of Finance could exercise great influence in every sphere of the economic life of the country.

Article 72 of the Statute defined the banking operations of the State Bank as follows: discounting bills of exchange and similar liabilities of a set term; advancing money and opening accounts; acceptance of deposits; buying and selling bills of exchange and other securities; transfer of money and other intermediate operations.

The State Bank made rapid headway in gaining the confidence of the public; between 1897 and 1910, its deposits increased from 638.8 million roubles to 784.4 million roubles. The increase in its general volume of business, as reflected in its yearly turnover, and the increase in the net profit from year to year, was also very considerable: the former increased from 162 million roubles in 1909 to 234 million roubles in 1913; the latter from 18.7 million roubles to 42.2 million roubles in the same period.²

¹ Raffalovich, A., *Russia, etc.*, p. 361 *et seq.*

² Appendix A, figures for turnover and net profit of the State Bank for each year from 1909-13.

84 THE ECONOMIC DEVELOPMENT OF RUSSIA

The capital of the Bank increased from 15 million roubles at its foundation in 1860 to 25 million roubles in 1876, and to 50 million roubles from 1894 onwards. In 1914 there existed no fewer than 982 branches, agencies, and offices of the State Bank throughout the country.

The interdependence of the State Bank and the Treasury was held by some to be an element of insecurity in the position of the Bank. In 1913, the Treasury account amounted to 547.6 million roubles, with an additional 327 million roubles of special State Funds.¹ Consequently the Bank might be forced to a fresh issue of notes at any time by the sudden calling up of the Exchequer deposit, particularly under the stress of political complications. The State Bank was also obliged to come to the assistance of the Treasury in case of any deficiency in cash. This arrangement was, however, held to be one which corresponded to the backward economic condition of the country. Since commerce and industry relied so largely on State assistance, there necessarily had to be a close connection between the Bank and the State. Owing to the imperfect development of the home money market, the large State deposit was essential to enable the Bank to carry on its operations. State policy was therefore in advance of the actual stage of development reached by the country in thus fostering the activities of the State Bank.

The distribution of the discount and advance operations of the State Bank shows how it was gradually becoming the "Bankers' Bank," and assuming a predominant position on the money market. This was accompanied by a proportionate, though not absolute, decrease in its activities in direct credit operations, in which its place was being taken by the private credit establishments. But in spite of the considerable increase in the resources of the money market, commercial needs increased still more rapidly, and continued to require the active support of the State Bank. In 1913 the discount and advance operations of the State Bank

¹ *Messenger of Finance*, No. 25, 1914 (R.). The State Bank paid no interest on the Treasury account. The latter remained in the hands of the Bank for two months usually; the State Funds for almost six months.

amounted to the sum of over £600 million sterling,¹ and were distributed through the channels of (1) direct credits, (2) credits to middlemen, (3) credits to private credit establishments, in proportions which showed an ever-increasing flow of credits to the latter group.² The credits to private banks rose steadily until they absorbed almost 75 per cent. of the Bank's total advances. Whilst the State Bank was thus consolidating its position as the central reservoir of the internal money market, private establishments for short-term credit (Joint Stock Commercial Banks, Societies for Mutual Credit, Municipal Social Banks) showed a much more rapid increase in the totals for their capital, deposits, current accounts. Their increase for the period 1900-12 was 198.9 per cent., while the corresponding figure for the State Bank was only 42.1 per cent.³

As compared with the other Central Banks of Europe, the position of the Bank of Russia with regard to its note issue would appear to have been particularly favourable, since its unutilized right of issue was considerably greater than that of any of the others.⁴ Two circumstances have, however, to be borne in mind. The first is as to the nature of the Bank's deposits, the most important item in which was the Treasury account, with its peculiar disadvantages. In the second place, the Banks of Issue of France and Germany dealt mainly in short-term bills, of the average duration of 15 to 20 days, and the discounting of bills of exchange amounted to 70-90 per cent. of all their commercial operations. The State Bank of Russia, on the other hand, dealt in bills of an average duration of 43-68 days, and the proportion of bills of exchange discounted to the total commercial operations undertaken was only 50 per cent.

As early as 1888, the State Bank had begun to assist the grain trade by granting credits, either directly, or through

¹ *Messenger of Finance*, No. 25, 1914. (R.)

² Appendix B. Detailed figures as to these three groups of credits. Analysis of credits to private banking institutions.

³ Appendix C. The increase of capital, deposits, current accounts, in Private Banks, and in the State Bank, from 1900-12.

⁴ Raffalovich, A., *Russia*, etc., p. 366. Appendix D. Unutilized right of issue of the Central Banks of Europe, Russia, England, France, Germany, Austria-Hungary, from 1903-13.

the medium of the railways, upon grain shipments.¹ It was much later, however, before its assistance took the more direct form of the construction of elevators, and the granting of advances at a special rate of interest on the warehouse certificates of these elevators. In 1911-12, the Board of Management of the State Bank approved of a programme for the construction of elevators in eight provinces of South-west Russia. There were to be 84 elevators, with an aggregate capacity of 58,800,000 poods, by the time the 1916 harvest was realized. By October, 1913, considerable progress had been made in the realization of this programme : 50 sites had been selected and acquired ; 7 elevators were completed and in working order ; 40 were in course of construction, 6 of which were to be opened in November and December, 1913.²

The criticisms directed against the State Bank may be divided into three main streams. There was first of all the charge of political corruption. It was said that the predominant influence of the Ministry of Finance provided a temptation to powerful individuals to use the privileges accessible through the Bank, not only for the purpose of carrying out their schemes of industrial development, but also to encourage individual undertakings as a matter of friendship, or to gain the influence of people whom they were anxious to win over to their side. Instances of this were cited against Count Witte, but as his term of office expired in 1903, they do not immediately concern our period.³ The Minister of Finance, in his capacity as a State official, had to keep in view the general economic and financial welfare of the country as a whole. There was no guarantee that measures to safeguard this would always be in line with the advantage of the Bank as a quasi-private banking establishment. Hence conflicts of interests would inevitably arise, in which either the Bank, as a private concern,

¹ Rubinow, I. M., *Russia's Wheat Trade*, op. cit., p. 12 : " State and Railway Credit on Grain."

² Ministry of Finance. The Explanatory Memorandum of the Minister of Finance to the Proposed Budget of the Empire for 1914.

³ Ozerov, I. K., *Economic Russia and its Financial Policy at the end of the nineteenth and the beginning of the twentieth centuries*, Moscow, 1905. (R.)

would suffer, or the economic welfare of the country would be sacrificed.

A second group of critics were the advocates of Industrial Liberalism.¹ They strongly condemned the attempt to place the most important industries, such as those connected with coal, iron, sugar, oil, etc., under State control, through the instrumentality of the State Bank. They held that, in its anxiety to further industrial development, the State Bank supported industries which had already demonstrated their inability to lead an independent existence, thus fostering an artificial and one-sided industrial development, which could not be for the ultimate good of the country. It was said that the giving of advances was made the pretext whereby the Minister of Finance established fiscal supervision in the economic sphere. So that the advances would be utilized to proper advantage, officials of the State Bank, of the Finance Administration and so on, were placed on the managing staffs of the borrowing firms, sometimes with disastrous results as far as the management of the business was concerned. The objections to this policy were two-fold : in the first place it involved State control and interference, which follows inevitably from the fact that in Russia the State was one of the chief customers of industry, and was also the chief money-lender ; secondly there was the undesirable result that the State finances became involved in the risks and fluctuations of industrial life.

The third group of critics, belonging to the agrarian section of the community, were dissatisfied with the undue assistance granted to industry by the Bank, and its neglect of the interests of agriculture.² They traced in their arguments the gradual pauperization of the agricultural community, chiefly in the Central Black Earth governments. Their objections were merged in the general attack on capitalism, launched by the various Socialist and Revolutionary groups active in

¹ Two typical authors of this school of criticism were "S. S. Kh.," *The Finances of Russia* (R.), 1908, and "L. G.," *S. Witte and the Collapse of Russian Credit* (R.), 1907.

² Ermolov, A. S., *La Russie agricole devant la crise agraire*, Paris, 1907. Stryk, G. v., "Die russische Industrie und der industrielle Protectionismus" (*Jahrbuch für Gesetzgebung und Verwaltung*, Leipzig, 1913).

the political and economic thought of the time.¹ They held that Russia ought to remain predominantly agricultural, that the growth of capitalism was forced and artificial, and would inevitably lead to the complete collapse of economic life in the country. In this growth, the development of banking played an important part, therefore it had necessarily to be regarded as inimical to the true interests of the country.

THE SAVINGS BANKS.—Savings Banks were established by the Law of 16 October, 1862, but did very little business until the '90's of last century. With the growth of commercial activity in the country their operations increased, particularly after the Law of 1 June, 1895, was passed, which simplified the opening of new Banks.

The first set of operations undertaken by these Banks was the collection of deposits, which were afforded certain legal privileges and safeguards. According to Article 2 of the Statute under which the Banks were constituted, the State itself was to be responsible for the safety of the sums and capital deposited, and these were not to be utilized for the general needs of the State. Further, the deposits were not to be liable to any measure of sequestration or expropriation apart from the cases mentioned in the Statute for civil legal procedure. They were to be exempted from certain stamp duties and taxes levied upon interest paid on money capital. All accounts were to have the privilege of secrecy, no information being given, except to depositors, their heirs, or persons entitled to dispose of their property, e.g., trustees, and at the request of the judicial authority. According to a regulation passed in 1902, surplus sums were to be deposited at the State Bank, which was to pay not less than $\frac{1}{2}$ per cent. annual interest.

Under the favourable conditions thus established, the number of Savings Banks and the deposits collected by them grew apace. The political disturbances during the years 1904-5 hampered progress considerably, but after the latter year, the development was rapid and continuous.² There

¹ Dealt with in section 1, sub-section 2, "Sociology."

² Appendix E. Turnover of the State Savings Banks 1903-12.

was a total advance of 958·1 million roubles in the amount of money deposited in the ten-year period 1903-12. Statistics for the same years referring to the number of Banks established, and the number of Savings books issued,¹ show the same upward tendency.

The Statute of 30 May, 1905, authorized the Savings Banks to transact various forms of life insurance. Four forms of insurance were undertaken, namely, simple life insurance, so-called "mixed" insurance, insurance of minors until the attainment of majority, insurance of life pensions. The rapidity of the growth of this side of the Bank's activities may be judged from the very striking increase in the total amount insured in all four forms, from 147,000 roubles in 1906, to over 9 million roubles in 1912.²

The second type of insurance, i.e., "mixed" insurance, was easily the most important of the four groups, both as regards the number of contracts drawn up and the sums insured. This was an advantage to the Banks, since the persons concluding this type of insurance have a more favourable "expectation of life" than persons concluding the first type. The year 1913 saw an increase in the insurance operations of the Savings Banks, owing to the compulsory insurance of 4,238 Customs officials, to the aggregate amount of 346,400 roubles per annum.

The growth in the number of Savings Banks was particularly strong in the towns, 99·8 per cent. of the latter having one or more such institutions. In rural districts, however, the development was much weaker; only 26·7 per cent. of the settlements which numbered more than 1,000 inhabitants possessed Savings Banks. Their distribution over the various districts of Russia was uneven, depending on the stage of cultural and economic development reached by the region in question. It varied from the industrialized region round Poland, where the average distance between the Savings Banks was 10 miles, to the sparsely populated tracts of Eastern Siberia, where it was over 100 miles.

¹ Appendices F and G. Increase in the number of Banks, Savings Books, and Deposits, 1903-12.

² Appendix H. Insurance Operations of the Savings Banks, Number of Contracts drawn up 1906-12.

An analysis of the occupations followed by the holders of Savings books shows that 70 per cent. of the latter were in the hands of town-dwellers.¹ The predominance of urban influence was also reflected in the insurance operations of the Banks,² where only 1·7 per cent. of the total sums insured were held by agricultural workers.

A very interesting phenomenon was the increasing importance of small deposits in the Savings Banks, as is shown by the following figures : ³

Deposits up to	25 roubles	formed	39·5%	of total deposits.
„ „ „ 25-100	„ „	18·6	„ „	„ „
„ „ „ 100-500	„ „	28·5	„ „	„ „
„ over 500	„ „	13·4	„ „	„ „

As the small depositor was the most important factor in the first set of operations undertaken by the Banks, so was "popular" insurance gradually acquiring a predominant significance in their portfolios. In 1911, life insurance policies of 1,000 roubles or less accounted for 55·4 per cent. of all the persons taking out these policies, in 1912 for 61·1 per cent. The average amount insured also decreased as regards life policies in 1912 from 766 roubles to 739 roubles.

These combined facts would seem to indicate at least the beginning of the formation of a lower middle class in Russia, which might be compared, as regards mentality and outlook, with the "small shopkeeper" class in Britain.⁴ The process was not, however, given sufficient time in which to attain to any striking degree of development. The Revolution of 1917 swept away all accumulated wealth, whether

¹ Appendix I. Occupations followed by the holders of Savings Books.

² Appendix J. Occupations followed by persons insured in the Savings Banks.

³ *Messenger of Finance* No. 5, 1914. (R.)

⁴ It is an interesting speculation as to whether this class, had it been given time to develop, would have formed the groundwork for the formation of an effective moderate "Centre" in Russian politics, and would have opened out a "middle road" between the conflicting paths of absolute autocracy on the one hand, and extreme revolutionary doctrines on the other. It would also have been an important factor in assisting industry to become thoroughly assimilated into the economic structure of the country, instead of remaining an alien growth.

held in large or small amounts, and all its owners were swallowed up in the colourless mass of the dispossessed.

Among the objections raised to the policy of the State Savings Banks, was the one that their deposits, instead of being utilized for the creation of small credit, and thus returning to benefit the people who accumulated them, were directed into State securities. An analysis of the manner in which the resources of the Savings Banks were invested shows that State Loans, and mortgage deeds of the Nobles' Land Bank, absorbed a large share of the Savings Fund (67 per cent. in 1913), a considerable portion also being invested in Railway Loans (21.4 per cent. in 1913).¹

On 12 June, 1910, however, a law was passed which stated that 20 million roubles should be set aside annually from the resources of the State Savings Banks, from which sum advances were to be given to Petty Credit Institutions,² either to provide them with the necessary basic capital with which to start operations, in the case of newly formed societies, or to extend the scope of their operations in the case of already existing institutions. This sum was to be increased in proportion to the advance in the deposits in the State Savings Banks, hence it rose by proportionate increases to 49.5 million roubles by the end of 1912. Up to 1 October, 1913, loans to Petty Credit Institutions were authorized to the total amount of over 31 million roubles; out of this amount, loans amounting to 23.6 million roubles had actually been advanced.³

Even in the few years intervening between the granting of this assistance to Petty Credit Institutions, and the outbreak of the war, very considerable progress in their development took place. The number of institutions and of their members doubled between 1911 and 1913: the

¹ Appendix K. "How the Savings Fund is invested."

² On the activities of the Petty Credit Institutions, *vide* Krivchenko, G., *Die laendlichen Creditgenossenschaften in Russland*, Münch., Volkswirtschaftlichen Studien, Stuttgart and Berlin, 1910. He indicates the difficulty of establishing these institutions on a sound basis, and ensuring the adoption by them of sound business habits.

³ Appendix L. Number and types of Institutions; advances received.

amount of capital which they possessed increased more than five times in the same period.¹

The activities of the Savings Banks reflect two very important movements which made considerable progress during the period under our particular consideration, and which were of special significance to the agricultural section of the community. These were, firstly, the transition of the peasantry from the communal to the individual system of landholding, and secondly, the growth of co-operative institutions. Both were forward movements in the task of bridging the gulf between the ruling minority of Russia and the people in general, in that they marked the beginning of greater individual initiative among the people, and a movement away from the "serf" tradition.

The combined effects of these two movements was beginning to lessen the influence and importance of the State Savings Banks as the main factor in collecting the savings of the population.² Figures for the years 1903-12, as regards the deposits received by the Savings Banks and Petty Credit Institutions respectively, show how the latter were gradually acquiring a position of predominant importance. The Institutions for Petty Credit only really began to attract deposits in 1905, when they possessed 6 million roubles, as compared with 77 million roubles in the Savings Banks: in 1912, however, the Savings Banks figure was only 61 million roubles, as compared with 73 million roubles in the Petty Credit Institutions.³

An analysis of the flow of deposits into both sets of institutions in the most important regions of Russia, shows that in the districts where the movement towards the new system of landholding was particularly strong, a specially large flow of deposits into the Petty Credit Institutions coincided with a lessening of deposits in the State Savings Banks, and even in some cases with a deficit. Particularly

¹ Appendix M. Statistics showing the growth of the Institutions 1911-13.

² *Messenger of Finance*, No. 24, 1914 (R.), p. 514, article by Mr. I. Nazorov on the "State Savings Banks and the Institutions for Small Credit."

³ Appendix N. Statistics showing the increasing predominance of the Petty Credit Institutions, 1903-12.

was this the case in some of the southern districts of Russia in the years 1908 and 1912, which were characterized by a mass transition to the individual system of landholding by the peasantry in these regions. The expenses of this transition, the expenditure on improving methods of work, fell largely upon the capital of the Savings Banks. In addition, there was a tendency to withdraw deposits from the Savings Banks, and place them in the Petty Credit Institutions to take advantage of the high rates of interest offered by the latter.¹

A further reason for the lessening of deposits in the State Savings Banks, particularly those provided by the agricultural section of the community, was the growth of co-operative institutions. These provided other and more readily accessible means of credit, and attracted increasing amounts of deposits in the regions where co-operation was making headway.²

THE LAND BANKS.—The two great Land Banks of Russia, the Nobles' Bank and the Peasants' Bank, each represented part of the general State policy of assisting the agricultural section of the community.³ Another phase of this same policy found expression in the opening up of Siberia, so as to relieve the pressure on the land in European Russia. The management of these two Banks was co-ordinated, and from 1900 onwards was under the control of the Ministry of Finance. The criticism levelled against the activities of both was that by their operations they increased the price of land in general. It was also held that, since the aim of the first was to support the large landowners, and of the second to support the small holder, their activities tended to counteract each other.

¹ In Credit Societies more than 7 per cent. was paid on 78 per cent. of the deposits; in Loan and Savings Associations, 6-7 per cent. on 57 per cent. of the deposits; only 5.8 per cent. of the deposits in Credit Societies, and 5.1 per cent. of those of Loan and Savings Associations, received rates corresponding to those paid by the Savings Banks (4 per cent.). *Vide* Appendix O, for figures as to these high rates.

² *Vide Economica*, October, 1921, "Co-operation in Russia," by M. S. Miller.

³ Note same development in other countries since the war, e.g., in Poland, the Border States, Rumania, Australia, Jugo-Slavia. *Vide Annuaire de législation agricole*, 1918 et seq.

THE NOBLES' LAND BANK.—The nobles, as a class, had always been impoverished and indebted.¹ This was not wholly a result of the labour difficulties following upon the emancipation of the serfs, but was a "hereditary peculiarity" of long standing. By some it was attributed to the laws of Peter the Great, by which the noblesse spent most of their lives in military or civil service, and were forced to leave the management of their estates to incompetent stewards. A contributory cause, from the 80's of the nineteenth century onwards, was found in the fall in agricultural prices, which affected all the European markets, and which was a result of improved transport and the opening up of the virgin wheat lands of Canada, America, India, etc. Repeated attempts were made to alleviate the evil from the middle of the eighteenth century onwards, usually by means of mortgage Banks founded and controlled by the Government to advance money to landed proprietors at a comparatively low rate of interest. This, although useful to some, did not cure the improvidence of the majority, and on the eve of the Emancipation, i.e., in 1860, noble proprietors found themselves indebted to the Government to the sum of 425 million roubles. This meant that 69 per cent. of their serfs were mortgaged. By 1880, over 300 million roubles had been paid off, mainly by the State crediting the landowner with the amount payable to him as indemnity for the section of his land which was allotted to the peasantry at the Emancipation. New debts were, however, speedily contracted. Between 1873 and 1874, nine new private mortgage Banks came into existence, but so great was the rush to obtain advances from them, that their paper became seriously depreciated. In 1881, the debt stood at 396 million roubles, and the rate of interest was so burdensome that there arose a strong demand for Government assistance. The nobles of Orel ventured to address Alexander III on the matter in 1883, as a result of which the Nobles' Land Bank was founded two years later.

The following were the aims, resources, and activities of

¹ Sir Donald Mackenzie-Wallace, *Russia*, Vol. 1, p. 191. The idea of the impoverishment of the gentry also forms the background of Anton Chekhov's well-known play, *The Cherry Orchard* (*Vishnevyy Sad*).

the Nobles' Bank as laid down in the revised Statute of 12 June, 1890. The purpose of the Bank was to assist members of the nobility by advancing ready money on the mortgage of their estates for periods varying from 11 to 67 years. In 1906, the issue of debentures replaced the advance of ready money.

The liabilities of the Bank consisted in (1) capital from the issue of special debentures (lottery) according to the law of 1889, (2) sums realized by the issue of 5 per cent. debentures, (3) reserve capital from the surplus income. Its assets were, (1) entrance fees paid by the borrowers, (2) the payment made by the borrowers to cover administrative costs, (3) the annual percentage paid by borrowers. The Bank advanced money on non-mortgaged lands, or on lands previously mortgaged, on condition that the mortgage was extinguished by the Bank advance. The sum advanced was not to exceed 60 per cent. of the value of the mortgaged property, and no money could be advanced on property valued at less than 500 roubles (£50). In special cases, the loan might be increased to 75 per cent., e.g., when it was claimed in order to extinguish a previous mortgage, assumed prior to the commencement of activities by the State Bank in the given locality. In Article 58 it was laid down that the mortgaged lands were to be valued either according to a normal or a special valuation. The scale of the normal valuation was established by the Ministry of Finance, the Home Office, and the Ministry of Agriculture, according to the actual prices for land. If used, it saved the trouble of making a special valuation, but ran the risk of being lower than the latter. Special valuations were based upon the average sale price of land in the given district, and the average annual income from the valued property, taking into consideration all circumstances and conditions likely to influence such income.

Article 68 of the Statute dealt with the control exercised over borrowers. The borrower had to sign a document, binding himself on the following points, the aim being to prevent any changes which might eventually reduce the value and income of his property : (1) Not to conclude any contracts on rent for a term exceeding three years, without

the permission of the Bank ; (2) not to receive payments in advance from the lessee for more than one year ; (3) not to sell his forest stock without the permission of the Bank, or against the confirmed plan of reforestation ; (4) not to sell or destroy any buildings included in the mortgage. The sale of the entire property, transferring the mortgage with it, was, of course, possible, with the knowledge of the Bank. Whenever any piece of land, by inheritance or contract, passed into the hands of any person not belonging to the hereditary nobility, the new owner or successor was obliged to refund the whole debt to the Bank within a period not exceeding 10 years.

The connection of the Bank with the general policy of the State was seen in various directions. For instance, its operations were bound up with the Nationalistic policy of the State, its advantages being denied to the nobility of Poland, the Baltic Provinces, Transcaucasia (modern Georgia), Finland, and to landowners of Polish extraction in the Western Provinces. These districts had founded and developed their own Land Banks.¹ The Bank also advanced money to Russian hereditary noblemen for the acquisition of real property (the advance amounting to 75 per cent. of the value of the property) from non-Russian owners, in some of the Western border provinces, corresponding to the Lithuania, White Russia, Eastern Poland, and Ukraine of to-day.

The State policy of reforestation was also revealed in the enactment that in carrying out the valuation of property for the purpose of making an advance on it, forests would only be taken into consideration if they were being exploited in accordance with the special plan officially laid down.

Although the operations of the Nobles' Bank did a good deal to carry out its aim of helping the large landowners to retain their land, the institution received very little commendation or support in the country. It was admitted that large-scale agriculture, whether conducted personally by the owner, or let out to a tenant, resulted in a relatively larger output than was obtained from the holdings of the small

¹ The Polish Credit Society, for example, founded in 1825 as a mortgage Bank for the rural districts of the Tsardom of Poland.

peasant proprietors.¹ This fact was of the utmost importance with regard to the export of grain and the support of the trade balance, which was a basic factor in the economic structure of the country.²

The useful function of the nobility as a class was also admitted; they fulfilled local duties, and were also a guide to the people in agriculture, showing them by actual demonstration the advantages of improved methods of cultivation. But the propertied classes remained identified with an oppressive political regime, and shared in the opprobrium incurred by the latter. Hence the Bank failed to do anything towards modifying the negative attitude towards private property which prevailed in Socialist circles throughout the country.

It was a constantly reiterated grievance that the interest charged on advances by the Nobles' Bank (5 per cent.) was lower than that charged by the Peasants' Bank (6-6½ per cent.). Critics did not take into consideration the fact that the advances of the Peasants' Bank were utilized in buying land, which involved a considerable amount of risk, while the Nobles' Bank only very exceptionally engaged in buying transactions.

On the whole, however, the activities of the Bank could not retard the general movement towards the breaking up of large estates characteristic of Russia during the half-century preceding the Great War. For instance, whereas in 1877 the amount of land held by the gentry was approximately 196 million acres (73 million dessiatines), it had diminished to 143 million acres (53 million dessiatines) by 1905. A further diminution of over 5 million acres took

¹ Rubinow, I. M., *Russia's Wheat Surplus: private and peasant farming compared*, p. 44 *et seq.* Kondratiev, Prof. N. D., *The Grain Market* (R.), Moscow, 1922. The following table appears on p. 6:

Periods.	Output on Peasants' Land. Per cent.	Output on large Owners' Land. Per cent.
1861-70	100	100
1871-80	107	112
1881-90	117	127
1891-1900	134	142
1901-1910	148	164

² *Vide* Section 2, "Trade," p. 40.

place between 1905 and 1907.¹ This shows clearly the steadily diminishing significance of the "squires" as a factor in the economic structure of the country. A closer analysis would bring out the fact that the economic centre of large-scale production in agriculture was moving from the Central provinces to the districts of New and South Russia. A change in management accompanied the change in location. Agricultural production on these estates was no longer in the hands of the landed gentry, but in the hands of a new class of capitalist "bourgeoisie."²

THE PEASANTS' LAND BANK.—The Peasants' Bank was founded in 1883. In 1895, its Statute was revised, and the functions of the Bank laid down as follows: it had to (1) advance money to peasants to buy land from such landowners as desired to dispose of their property, (2) to buy land in its own name and on its own account in order to sell it to the peasants, (3) give advances to peasants to buy land independently of the Bank, and to extinguish debts on these lands, incurred prior to their purchase. Advances for the purchase of land were to be given to village communes, associations of peasants, individual peasants, or to citizens who had settled on the land, and were devoting their whole time to agriculture. These advances were not to exceed 90 per cent. of the value of the land by special valuation, and 60 per cent. by normal valuation. The Bank was to go into all requisite details before advancing the money, and see that it was properly secured. The terms of the advances were to be 13, 17, 26½, 38½, and 51½ years, and the rate of interest, varying with these, 11.5, 9.5, 7.5, 6.5, and 6 per cent. It was further laid down that the lands bought by the Bank and not resold should never at any time exceed in value the amount of the Bank's capital.

¹ According to the statistics of the Central Statistical Committee, Petrograd, 1907, and *Review of Statistical and Economic Information on the Agriculture of Russia and some other Countries*, Petrograd, 1907. (R.) Vide also Sviatlovsky, V. V., *Der Grundbesitzwechsel in Russland*, 1861-1908, Leipzig, 1909.

² The economic degeneration of the landed aristocracy effectively prevented the formation of a political party based on the ownership of land, which might have acted as a counterbalance to autocracy, and softened the rigidity of the separation between the latter and the people as a whole.

A considerable stimulus was given to the activities of the Bank by the Revolution of 1905, the agrarian side of which emphasized the "land-hunger" underlying the discontent of the peasantry. Up to 3 November, 1905, 2,465,438 acres of land had been purchased by the Bank in the 50 governments of European Russia. By 1 January, 1907, this figure had risen to 3,402,930 acres.¹ The Land Fund of the Bank showed a similar increase. Up to 3 November, 1905, it was 624,558 acres. By 1 January, 1907, it had increased to 3,936,134 acres. Further, by the Ukazes of 1906, the Appanage Lands (12 August), the State Lands (27 August), and the Cabinet Lands (19 September) were handed over to enlarge the peasant land fund. After 1908, there was a decline in the operations of the Bank, owing to the gradual completion in the transfer of this land, and also to the gradual reductions of offers from private landowners.

The activities of the Peasants' Bank reflected very clearly the process of the liquidation of the village commune, and the transition of the peasantry to individual ownership, already noted in connection with the State Savings Banks. In the operations of the Bank in the first decade of its existence, from 1883-94, the predominance of collective buying was very marked.² Village communes ("obshchestvo") received 42.4 per cent. of the total advances given, associations of peasants ("tovarishchestvo") 56.3 per cent. and individual householders only 1.3 per cent. By 1913, however, the situation had been entirely reversed, and individual householders received 87.1 per cent. of the land sold, as compared with 6.4 per cent. sold to village communes and associations.³ The same change took place in the loan operations of the Bank. In 1906 the percentage of loans to individual purchasers, as compared with the total number of intermediate operations, was 18.7 per cent.; by 1913 it had risen to 80.2 per cent.⁴

¹ Appendix P. Operations of the Peasants' Bank from 1906-13.

² *Encyclopædic Dictionary*, Brockhaus, Vol. XVII (R.), p. 726.

³ Appendix Q. Sale of land to the peasants, distinguishing individual and communal buyers.

⁴ Appendix R. Loan operation of the Peasants' Bank 1906-13, with percentage of loans to individual purchasers as compared with the total number of intermediate operations.

The criticisms directed against the Peasants' Bank vary according to the particular predilections of the economist who makes them. Supporters of communal ownership of land, for example, considered that the Bank's attitude towards village communities was not sufficiently favourable.¹ The Peasants' Bank was accused of failing to support the weakest section of the peasantry, even when, in later years, it advanced sums amounting to 90 per cent. of the estimated value of the land. The Bank's valuation was very often beneath the purchasing price, and the difference had to be paid in cash by the peasant buyer, a feat often beyond the power of the poorer section of the community. In the second place, the Bank was accused of favouring a special class of the nobility by purchasing their properties at too high a price.

Supporters of individual ownership, on the other hand, held as their chief objection to the policy of the Peasants' Bank, that it gave undue encouragement to the acquisition of land by communes and associations, apart from the fact that it raised the price of land.² It was said that the Bank preferred to make advances to village communes rather than to individual householders, because the advance required was less, less trouble and work were involved in the transaction, and the results of the activities showed themselves in large sums, which indicated great progress in the operations of the Bank.

A third criticism directed against the Peasants' Bank was that its operations were instrumental in raising general land prices.³ The net result of the activities of the local Land Reform Committees, formed in 1906 to assist the Bank in its task of transferring land to the peasantry, was to accumulate in the hands of the Peasants' Bank an unrealizable fund in land at high prices, and the increase in the prices of land generally, owing to considerable areas being taken off the land market. When land was sold, it was mostly to well-to-do peasants, who were least in need of it. The poorer

¹ Krasik, A. V., *The Peasants' Bank, etc.* (R.), p. 81.

² "S. S. Kh.," *The Finances of Russia* (R.).

³ Mavor, James, *Economic History of Russia*, London 1904, pp. 343-6.

ones had to go without, or when they did buy relatively high-priced lands through the Peasants' Bank, they became debtors of the State to an amount which they could never hope to extinguish. Hence follows the undesirable position that the State must inevitably suffer pecuniary loss, while the peasantry is condemned to hopeless insolvency.

It would appear, therefore, that the Peasants' Bank, powerful as it was in means and organization, failed in its task of transferring land to peasant holders in quantities sufficient to satisfy the needs of agricultural progress. Some critics considered that the Bank's failure was to be traced to the paucity of the assistance rendered to it by the State; by others, the pauperization of the agricultural class was traced to this very principle of State assistance.¹ It was a widely accepted opinion in Russia, even among people of liberal views who would have condemned benevolent State interference in other countries, that the peasantry ought to be assisted. Hence the cancellation of the redemption repayments in 1906, due by the peasantry to the Government, as payment for the land ceded to them at the Emancipation, was looked upon as quite natural, in spite of the very considerable financial sacrifice it entailed for the State Treasury. But in spite of this latter concession, and of the efforts of the Peasants' Bank, the position of the peasantry with regard to the land remained unsatisfactory up to the outbreak of the war. This was obviously an element of insecurity in a country where the peasants made up 80 per cent. of the population.² It also formed a powerful basis for the Socialist appeal for reform along distributive lines.

Group II. Social Credit Institutions.

MUNICIPAL BANKS.—Among the Social Credit Institutions, Municipal Banks deserve special mention. The Law of 1862 authorized towns to institute banks, further regulations being laid down in the Law of 13 January, 1912. By

¹ There was a similar controversy as to the advisability or otherwise of benevolent State legislation in England. The Poor Laws were held responsible for the pauperization of the agricultural labourer. *Vide* "Report on the Poor Law." Cd. 2728.

² Section 1, subsection 2, "Population," p. 34.

1 January, 1914, there were 319 such banks in existence.

Their system of management was the following. A committee was elected, called the "uchetno-sudny komitet" ("discount-advance committee"), which decided as to the reliability of persons claiming advances on bills of exchange and goods. The Town Council elected the members of this Committee, and also the Directorate,¹ for a term of two years—the Director himself for a term of four years. Up till 1883, the town was held responsible for the deposits received by the Municipal Bank, but later the responsibility remained with the Bank alone. The activities of the Bank were under the control of the Town Council, which could in turn claim revision of the Bank's accounts by the Government.²

The functions of these banks were: to receive deposits, on long and short term, and on current account; to discount Russian and foreign bills of exchange, and other liabilities based on personal credit, also to discount "coupons"; to advance money on bills of exchange with one signature, on the security of agricultural holdings, or real property in the town, when the Town Council gave its consent to the operation by a special resolution; to advance money against securities, warrants on goods ("varrantny"), valuables not subject to deterioration; the mortgaging of houses, shops, workshops, factories, real property in the town; to advance money to the Town Council itself, and to the County Council of the same region; to transfer money; to purchase securities for private customers. The Banks also had the right to mortgage their own securities.³ The minimum capital upon which a Municipal Bank could be founded was fixed at 10,000 roubles (£1,000), while the total liabilities might not amount to more than ten times the total ordinary share and reserve capital.

Group III. Private Credit Institutions.

JOINT STOCK COMMERCIAL BANKS.—From 1872 onwards, the law regulating Joint Stock Commercial Banks, conferred upon the Minister of Finance the power of confirming their

¹ Articles 6 and 15 of the Statute of 1912.

² *Ibid.*, Article 34.

³ *Ibid.*, Article 44 *et seq.*

Statutes, in all cases where the capital did not exceed 5,000,000 roubles, and where there was joint responsibility on the part of the members. The two limitations with regard to these banks were that, (a) the capital should not be less than 500,000 roubles (£50,000), and each share not less than 250 roubles (£25); (b) they were not permitted to acquire real property, except the buildings required for their own premises, or for warehouses.¹

Further regulations of the 1872 Statute were as follows. Joint Stock Banks could not be founded by fewer than five persons. One-half of the share capital had to be deposited when the shares were subscribed for, the other half within six months after the announcement that the subscription was open.² So-called "blank credits," i.e., payments on account of customers' overdrafts, might not at any time exceed one-tenth of the paid-up share capital, and might not be granted for a longer term than 30 days.³ The stock of cash kept was never to fall below 10 per cent. of the bank's liabilities. If it was desired to utilize this cash in order to meet the liabilities of the Bank, the latter had at the same time to contract its discounting and lending operations in a corresponding degree. The total liabilities of the Bank might not amount to more than five times its share and reserve capital.⁴ The Banks were allowed to issue certificates payable to order. Only in exceptional cases had the Bank the right to mortgage the real property of such of its debtors as failed to meet their obligations.

In Russia before the war, the connection between Joint Stock Banks and Industry was very close.⁵ This is explained by the fact that the investing public was not eager to place its money in industrial shares. Hence when a joint stock company was to be floated, it had to apply for assist-

¹ *Ustav Kredityny*, Section 10, Articles 6 and 7.

² Paragraphs 17 and 18 of the 1872 Statute.

³ Article 19 of the 1872 Statute.

⁴ Law of 1883.

⁵ *Vide* P.P. Consular Reports, *Report on Economic Conditions in Rumania*, 1921, by Mr. Alex. Adams. He notes that the post-war banking world in Rumania has shown a tendency to forsake the strict principles of banking practice, and venture into the sphere of commerce. This the author considers an abnormal and undesirable state of affairs. But it was by no means abnormal in pre-war Russia.

ance to the banks, where the surplus wealth of the community was concentrated.

Banking thus became identified with industrial capital, which in Russia was mainly of foreign origin, in contradistinction to commercial capital, which was mainly found within the country. It was inevitable that foreign capital should be more concerned with the immediate realization of profits rather than with the ultimate economic welfare of the country. Nationalist sentiment was therefore inclined to regard it with disfavour, and to extend this disfavour to the banking system which fostered it.¹

Between 1864 and 1914 47 Joint Stock Commercial Banks were founded in Russia, ten of these coming into existence between 1904 and 1914.²

¹ Appendix S. Table showing the ratio of commercial to industrial capital in the country, per head of population, and the geographical distribution of such capital.

² Appendix T. Growth in the number of Joint Stock Banks and their branches, 1904-14.

CHAPTER VI

CURRENCY AND THE NATIONAL DEBT.

THE MONETARY REFORM OF 1897.

FOR a comprehension of the currency system of Russia, and the controversies which centred round it during our period, it is essential to go back to the Currency Reform of 1897, and consider the main changes brought about by it. Prior to that date, the standard of value in Russia had been the silver rouble, which served as a basis for the monetary unit, the credit rouble. Recent changes in the world situation with regard to silver had involved grave disadvantages for Russia, as a silver-standard country, in her commercial and financial connections with the bi-metallic or gold-standard states of Western Europe. These changes included the demonetization of silver over a considerable part of Europe, and an increase in the amount of the white metal mined, with a consequent fall in its price.¹ The fact that the course of the credit rouble was liable to sudden and violent fluctuations from these causes, which could not be controlled from within the Empire, introduced an element of uncertainty into foreign trade, and encouraged speculation in the Russian rouble on foreign bourses, which reacted unfavourably on the whole economic life of the nation. A further embarrassment had been experienced from 1881-96 in the scarcity of money tokens within the country. Not only had the quantity of credit notes not increased during that period, but a slight decrease had been apparent: on 1 January, 1881, the credit notes in circulation amounted to 1133.5 million roubles, whilst on 1 January, 1896, they equalled only 1121.3 million roubles.² This stationary

¹ *The Ministry of Finance from 1802-1902* (R.), p. 417.

² *Ibid.*, p. 415 *et seq.*

condition of the currency coincided with a constant increase in the economic forces of the country. There was a considerable increase in population, in the totals for the output of grain, and for the export trade, and a great expansion of the railway net.¹ It was obvious that these increased economic activities demanded increased monetary resources, which could not be suitably provided on the existing basis.

The Minister of Finance, who is best known under his later title of Count Witte, was convinced that only the establishment of the Russian currency system on a gold basis could provide a solution to these difficulties, and he therefore directed his attention to the accomplishment of this aim. He himself gives an account of the carrying out of the reform,² the opposition which he encountered, and the principles upon which he based his decisions. He holds that

"the establishment of the gold standard definitely established Russia's credit, and put her financially on an equal footing with the other European powers. Owing to it, we weathered the Japanese War and the subsequent revolutionary movement.³ Without it, economic and financial collapse would have occurred at the very beginning of the war, and all the economic achievements of recent decades would have been annihilated. In a slight measure, Bunge and Vishnegradsky prepared the financial system for the introduction of the gold standard, but they left it to me to elaborate the detailed and final plan for the currency reform.⁴ Financial and economic experts had no theoretical or practical knowledge of the whole matter, the subject was not taught in institutions of higher learning, and there were no good books in Russian on currency problems. The country had lived under a paper régime since the Crimean War, and the very idea of a metal currency had become obscured in the Press, and in the minds of educated people. The reform was specially opposed by that section of the community which was interested

¹ From 1881-96, the population increased by 32.8 million inhabitants, the general total of export rose from 506.4 million roubles to 667.3 million roubles, the output of grain from 1.518 million Imperial bushels to 1.915 million, and the railway net expanded from 21,195 versts to 34,500 versts.

² The *Memoirs* of Count Witte, p. 59, chapter on "My work as Minister of Finance."

³ Vide Helfferich, K., *Das Geld im Russ.-japanischen Kriege*, Berlin, 1906.

⁴ Bunge and Vishnegradsky had preceded Witte in the Ministry of Finance, and their policy had been instrumental in increasing the gold reserve from 186 million roubles in 1877 to 911 million roubles in 1895.

in the export of commodities, particularly farmers. They held the erroneous idea that high prices due to the depreciation of the rouble were advantageous, but failed to realize that they had to pay correspondingly higher sums for imports."

Granted that the monetary reform was necessary, opinion was still divided as to whether gold or silver, or both, should be the basis of the reformed currency. The objections to silver as a standard have already been summarized: the agitation for international bi-metallism had been unsuccessful, and only France was anxious to see bi-metallism established in Russia since, through the increased demand for silver thus brought about, its price would rise, and confer a great financial benefit upon France; gold mono-metallism remained as the only alternative.

"Only gold can properly regulate the paper circulation, can afford a basis upon which the exchange of commodities can be properly carried out, and upon which the monetary system can obtain the qualities of elasticity, flexibility, and the power of expansion.¹

A bill for the introduction of the gold standard of currency was laid before the Council of the Empire in April, 1896, but met with such strong opposition that it was withdrawn. However an extraordinary session of the Finance Committee passed the bill on 2 January (14), 1897, and a Decree enacting the Reform was promulgated on the following day. Thus the monetary reform was carried into effect, not by the passing of a law, but by the promulgation of an Imperial Ordinance or Decree.

For some time the course of the credit rouble had been steady at the rate of 66 kopeks gold = 1 credit rouble, and it was upon this depreciated rouble that the reform was based. The reason given for this decision was that the

¹ *The Ministry of Finance from 1802-1902*, p. 417. A summary of the advantages of the gold standard for Russia is given in Drage, G., *Russian Affairs*, p. 257: (1) "It simplified questions of foreign trade, gold being the international standard of value, whilst the constant fluctuations in the value of the credit rouble had been a hindrance in commercial transactions with Russia. (2) The possession of a gold reserve is an element of power within a country. It is a guarantee of solvency in arranging for loans, and affords the possibility of reverting to a paper currency during a time of financial pressure, e.g., war."

whole economic life of the country had become adjusted to this level, and would have been disturbed by the adoption of another rate.¹ As it was, Witte claims that the transition passed practically unnoticed by the population, which is a matter of great importance when we remember the conservatism and distrust of change likely to be manifested by the peasantry towards any alteration in the medium of exchange.²

The following steps mark the gradual introduction of the gold standard into Russia. The Ukaz of 3 January, 1897, established a new gold coinage, and on 14 November of the same year, another Ukaz laid it down that notes should be convertible into gold on demand. By the Law of 7 June, 1899, the Russian monetary system was declared to be based on gold, and the monetary unit for the Russian Empire to be the rouble, which had to contain a requisite amount of fine gold.³ The gold coinage was to consist of the Imperial = 15 roubles, a 10 rouble gold piece, the half-Imperial = 7½ roubles, and a gold piece = 5 roubles. On 28 March, 1898, silver was declared to be legal tender only to a limited extent, up to 25 roubles in the case of private payments, and up to 5 roubles for the payment of Customs duties.⁴

¹ The following table, taken from S. S. Kh., *Finances of Russia* (R.), will show the steadiness of the course of the credit rouble during the 3-year period 1896-8, and its previous fluctuations :

Course of the credit rouble on the St. Petersburg exchange (in kopeks. 10 roubles = 1 Imperial).

In Years	2nd Jan.	1st April.	1st July.	1st October.
1890.	68·68	68·21	72·25	77·46
1891.	73·75	74·13	69·11	65·19
1892.	60·90	63·61	61·92	62·97
1893.	63·53	64·98	66·05	65·27
1894.	66·67	67·07	67·02	66·84
1895.	67·57	67·43	67·57	67·57
1896.	67·57	66·67	66·67	67·67
1897.	66·67	66·67	66·67	66·67
1898.	66·67	66·67	66·67	66·67

² *Vide* Drage, G., *Russian Affairs*, p. 257, "It is admitted, even by the opponents of Witte's policy, that the course taken was one which would cause least disturbance in the financial conditions of the country, and would make "no one richer, no one poorer."

³ The text of the Coinage Law is given on p. 69 of the *Russian Journal of Financial Statistics*, Specimen Numbers A and B, 1900 and 1901. Petrograd, 1901. (English Edition.)

⁴ Paragraph 29 of the Law of 7 June, 1899, on the "Circulation of Coin."

The measures taken with regard to the position of the State Bank and the issue of credit notes now fall to be reviewed, since the monetary reform could not be considered complete until these also had been placed upon a firm foundation. A series of Imperial Orders and Decrees were directed towards the liquidation of the inconvertible note issue, and towards securing the immediate convertibility of credit notes into gold. An Imperial Order of 29 August, 1897, states that :

“ State credit notes are to be issued strictly in accordance with the actual needs of the monetary circulation, under the guarantee of gold : the amount of gold guaranteeing the notes must not be less than one half of the total sum of credit notes issued, when the latter does not exceed 600 million roubles.”

That is to say, the State Bank had the right to issue credit notes without any gold backing to the extent of 300 million roubles, but after that limit was reached, every credit note issued had to be backed, rouble for rouble, by gold.

The exchange of bank notes for gold was now on a firm basis, since these notes were covered to the extent of 146·3 per cent. of their value.¹ There were in circulation in 1901, 552·3 million roubles of bank notes. By law, these had to be covered by 276·2 million roubles, which was equal in value to half the amount of notes issued. But as a matter of fact, the gold in the State Bank alone amounted to 737·3 million roubles, and together with the gold in the Treasury it exceeded the amount of bank notes in circulation by 255·5 million roubles.² There could accordingly be no doubt as to the stability of the exchange of notes for gold. Credit notes were in effect transformed into notes of the State Bank, and were henceforth to fulfil their proper function as currency by being issued solely with regard to the needs of the State Bank as a credit institution, and in no degree to satisfy the needs of the State Treasury.

¹ *Russian Journal of Financial Statistics*, op. cit.

² There were 807·8 million roubles of gold in the State Bank and the Treasury, as compared with the 552·3 million roubles of notes in circulation, op. cit. *supra*.

The importance of placing the issue of credit notes on a firm foundation could not be gainsaid, since their significance in the economic life of the country was very great: their issue amounted to more than 50 per cent. of the liabilities of the State Bank.¹

With regard to the gold reserve, it is worthy of note that the gold held abroad was always counted as part of the reserve upon which the issue of notes was calculated, although in the event of a war, such gold would not be obtainable. In 1914 the gold reserve of the State Bank amounted to approximately £169 million, of which £16 million were held abroad.²

The gold reserve was a favourite point of attack with the enemies of Russia's financial system, some of whom went to the extent of denying its existence altogether.

Russia's financial system was thus placed upon a gold basis, upon which it remained up to the financial *débâcle* induced by the Great War, and the subsequent revolutions. The reform was deliberately carried out by the Government, whose policy demanded a stable currency, in the interests of the national credit, and of the foreign trade of the country. But again Government policy was seen to be not entirely in line with the immediate economic interests of the country. Critics maintained that Russia, an economically backward country, was not ready for such a difficult step; and that the fact that she had been artificially forced into a position of nominal equality with the more fully developed capitalistic countries of Western Europe involved an unduly severe strain upon her national energies.

The new system demanded the accumulation and maintenance of a gold reserve within the country. Since Russia did not possess the necessary gold within her own borders,³ it had to be attracted from abroad. The various

¹ *Messenger of Finance*, No. 25, 1914 (R.). *Vide* Appendix A, Issue operations of the State Bank; their significance as compared with its other liabilities.

² Appendix B. Analysis of Russia's gold reserve for the years 1910-14.

³ S.S. Kh., *Finances of Russia* (R.), pp. 29-30, states that Russia does not possess the stock of gold which would enable her to establish a metal circulation by natural means. Therefore her so-called currency reform

means adopted in carrying out the latter aim, of which a short survey follows, were condemned as inimical to the true economic welfare of the country.¹

(1) The Tariff policy was directed towards securing a favourable balance of trade, and thus, it was hoped, an inflow of gold into the country. (a) Imports were to be kept as low as possible, hence high duties were imposed on foreign goods brought into the country. Whatever the effect on the balance of trade, the effect on the main body of home manufacturers was certainly unfavourable since they had to pay high prices for machinery and other necessities of industrial life, which could only be obtained abroad. Government institutions were prohibited from placing orders abroad, although foreign manufactures were often better and cheaper than Russian, and in some cases the articles required could not be obtained at all within the Empire. The fulfilment of this policy involved an increase of 80-100 million roubles in the annual expenditure of the Ministries of War and Marine. The beginnings of industrial life within the country were thus seriously hampered.

(b) Exports, on the other hand, were encouraged. The grain export was stimulated in various ways. Special railway tariffs were arranged for grain shipments. Further, taxes were levied on the peasantry, who were forced, in order to pay them, to take their corn to market as soon as it was harvested. This large quantity of grain, thrown all at once on the market, caused a decline in price, disadvantageous to the peasant, but to the advantage of the exporters. This undue pressure to export grain led to a decrease in necessary consumption, and a deterioration in the standard of life among the peasantry. "We export, not the superfluous, but the necessary," was the conclusion of a Russian economist.²

(2) Russian bonds held abroad were liberated, by the was simply, "an artificial fixation of the course of the money tokens, and their exchange into gold, artificially attracted to the country by foreign loans." Ziv, V. C., *Foreign Capital in the Mining Industry of Russia*, Petrograd 1917, pp. 105-11, states that the output of gold was decreasing owing to the lack of capital.

¹ Ozerov, I. K., *Economic Russia*, etc. (R.), p. 164 *et seq.*

² *Ibid.*, p. 189.

Ukaz of 4 December, 1900, from payment of the coupon tax. The ultimate disadvantage of this policy was that it tended to increase the amount of the National Debt held abroad, and hence an eventual outflow of gold would take place.

The conclusion is therefore reached by the critics of the reform, that the establishment of the gold standard, although an excellent thing in itself, had disastrous results for Russia at the stage of economic development which she had reached. The "Europeanization" of the country was not complete, therefore the gold standard was established and maintained only by diverting the stream of the national economic life from its natural channels of development, and imposing an enormous strain upon the vital energies of the country.¹

The acid test of war and domestic revolution was applied to the Russian financial system in the years 1904-6, the result being at least a temporary disturbance in the conditions established in 1897, although some critics go so far as to state that these disturbed years saw the virtual suspension of the gold standard.² Recurring foreign wars had always been the persistent enemy of the Russian financial system, in the excessive issues of paper money which they inevitably entailed, and the increase of the National Debt. The Russo-Japanese War was no exception to this rule. Military exigencies brought about the issue of a great number of credit notes, which had not been liquidated by 1907. Gold had practically disappeared from circulation. The State still retained its old powers of issue, and the State Bank had not yet been able to become an independent issuing institution. Evidently, therefore, the needs of self-defence

¹ Yasnopolsky, L. N., "The State Bank," in *Questions of State Economy*, ed. by P. D. Dolgorukov, 1907 (R.), p. 233. The author also holds that the metallic currency was only established at the cost of great efforts, and involved the directing into artificial channels of the commercial, tariff, railway, industrial, and credit policy of the country.

² L. G. S. U. Witte and the *Collapse of Russian State Credit* (R.), Chap. II. In the last quarter of the year 1905, almost 200 million roubles were advanced on bills of exchange, as bank advances, and as advances to private persons. At the same time, 120 million roubles of new credit notes were issued. Thus the equilibrium established by law between the issue of credit notes and the gold reserve was destroyed, with a very unfavourable effect upon Russian credit.

had, at least for the time being, nullified one part of the Reform of 1897, i.e. the removing of the unlimited right of issue from the State, and transferring it to the representatives of the financial interests of the country.

The finances of the country were speedily restored to at least the outward semblance of order, mainly by the conclusion of the 1906 loan,¹ and the confidence of foreign countries in Russia's financial stability was restored. The gold standard was not, however, re-established in its full integrity, as is seen from an analysis of the monetary circulation in the years preceding the recent war.

From 1906 onwards, the number of bank-notes in circulation steadily increased, whilst there was a corresponding decrease in the amount of gold and silver circulating in the country.² Thus, in 1906, 55.4 per cent. of the monetary circulation consisted of paper money; by 1914 that percentage had risen to 72.9 per cent. Gold in circulation, on the other hand, had declined from 38.5 per cent. in 1906, to 21.7 per cent. in 1914.

The lessened circulation of gold coin was the result of the deliberate policy of the State Bank, which aimed at substituting as far as possible the small notes for the coined metal, and concentrating the gold in its vaults. This phenomenon was not confined to Russia, but was apparent in the other principal European countries as well, and was the outcome of what Professor Nicholson calls the "Golden Calf theory of gold reserves."³ When Germany demonetized silver after the Franco-German war of 1870-1, France and Russia found it necessary to follow suit. But Professor Nicholson holds that,

"the nominal adoption of the gold standard was only imperfectly realized in practice, because the different kinds of representative money were only imperfectly convertible into

¹ Mr. Kokovtsev, in his speech in the Duma of 27 November, 1907 expressed the opinion that Russia had emerged triumphant over all her difficulties, with her national finances on a firm foundation. *Vide* Appendix C for an article in the current files of *The Times*, showing that the same optimism with regard to Russian finances prevailed in Britain.

² Appendix D. Amount of gold, bank-notes, and silver, in circulation from 1897-1914; the same as percentages, 1906-14.

³ Nicholson, J. S., *War Finance*, London, 1917, p. 38.

gold. In normal times—within the customary narrow limits—they were convertible into gold; but on the slightest strain, some kind of difficulty was put in the way of getting the gold immediately."

The idea grew up that paper was good enough for internal circulation, that gold should be "economized" and kept for external payments. This tendency was intensified by the disturbed political conditions in Europe, particularly after the Morocco crisis of 1910. Hence the great banks of Europe, including the State Bank of Russia, piled up huge gold reserves to act as the war chests of their respective countries in case of need, and the circulation of gold coinage, for internal use, gradually decreased.¹

The outbreak of hostilities in 1914 was followed by the immediate adoption of the principle of inconvertibility by all the belligerent countries. As regards Russia, by the Decree of 23 July–5 August, 1914, the State credit notes were declared to be no longer convertible into gold on demand, and the State Bank was authorized to issue 1·200 million roubles of notes beyond the legal limit.

THE NATIONAL DEBT.

When studying the development of Russia's financial system, it has to be specially clearly borne in mind that both politically and economically, Russia differs fundamentally from the countries of Western Europe. She is a country "still young in culture."² Having emerged from the devastating flood of barbarism involved in the Tartar invasion and domination, which, beginning in the twelfth century, and only coming to an end in the fourteenth, lasted no less than two hundred years, and in which all culture and political progress had been completely submerged, her next great task was to build up and consolidate that mighty Empire, which, before the Great War, was estimated to extend over more than one-sixth of the entire surface of the

¹ For post-war developments, *vide The Russian Economist*, Journal of the Russian Economic Association in London, Vol. I, No. 2, January, 1921, "The Fate of the Russian Gold Reserve," by Mr. V. I. Novitsky.

² Raffalovich, A., *Russia*, etc., p. 342.

globe. In view of the immensity and complexity of the latter task, it is not surprising that the great changes in the industrial and commercial world, coming to fruition in the course of the nineteenth century, and comprised under the name of the "Industrial Revolution," should have found Russia less prepared to adopt and carry them out than were other lands which had been less hampered in the early course of their history. It was only within comparatively recent years that the process of changing the economic basis of the country from agriculture to a combination of agriculture and industry, had been making considerable progress, and that the system of transport was being brought to a stage of development at least approximating to the demands of trade. This process of "Westernization" involved heavy initial expenditure, which it was found impossible to meet out of home resources. Much of it had to be provided for by the raising of loans abroad. Hence foreign borrowing was an essential part of the Government's schemes of economic development.

In the political sphere, Russia, with her strong autocratic tradition, also differed very widely from the other countries of Europe, where democratic ideas had made headway at a much earlier date. However foreign it may be to modern conceptions of Government, it is nevertheless necessary to realize that until the year 1917, the destinies of the great Russian Empire were controlled by sovereigns and their ministers, who adhered firmly to the doctrine of absolutism, possibly as much from a realization that it simplified the extremely complicated task of government, as from any strong religious convictions on "the Divine right of Kings." During the 96 years elapsing between 1817 and 1913, only five Emperors ruled in Russia.¹ Within the same period, there were eleven Ministers in charge of the financial affairs of the country, some of the more prominent of whom held office for what seem to us very long periods of time. Kankrin, for instance, was in power from 1824

¹ Alexander I, 1804-25, 19 years; Nicholas I, 1825-55, 30 years; Alexander II, 1855-81, 26 years; Alexander III, 1881-94, 13 years; Nicholas II, 1894-1917, 23 years.

until 1843 (19 years), Reutern from 1860 until 1870 (10 years), and Count Witte also for a period of ten years, from 1893 until 1903. This permanence of control would seem to make it clear that the personal factor in politics and finance had much greater scope in Russia than it had in the more democratically organized countries of the West.

The National Debt of Russia, from its origin in 1769, up to the middle of the nineteenth century, owed its growth largely to the expenditure necessitated by recurring foreign wars or internal disturbances. The latter factor had peculiar significance in the case of Russia, with her numerous subject peoples within the Empire, for example, the inhabitants of Poland, the Baltic States, Finland, far from being welded together into a homogeneous whole. Another factor of importance in a predominantly agricultural country like Russia, was the constant possibility of bad harvests, involving a heavy deficit in the annual Budget, which had to be met by a loan. From the middle of the nineteenth century onwards, a new cause of Debt increase was found in the expenditure on railways.

The importance of recurring foreign wars as a factor in inducing disorder in the finances of Russia, and increasing her Debt, is obvious as early as the reign of Catherine II (1769), when, on the occasion of a war with Turkey, Russia first had recourse to credit abroad.¹ Foreign loans were raised, on quite favourable terms, with Dutch and Italian bankers, and a State Assignat Bank was founded to supply a source of internal credit. In the reign of Paul I, Russia assumed part of the debts of the Polish crown, and this, added to a further issue of assignats, brought the national finances into a state of disorder. The latter was still further enhanced by the struggle with Napoleon, which brought the issue of assignats up to 836 million roubles, and reduced their value to 20 silver kopeks = 1 rouble assignat. Some of the loans contracted at that time, to the extent of 98 million roubles, remained unredeemed up to 1907. This was in the reign of Alexander I, during which the credit of

¹ Migulin, P. P., "The National Debt of Russia," in *Questions of State Economy*, Petrograd 1907 (R.).

Russia was not in a good position, as evidenced by the fact that loans had to be contracted at 6·8 to 7·3 per cent., as compared with 4½ to 5 per cent. in the time of Catherine and Paul.

During the ministry of Kankrin, who was in power from 1824-43, this state of affairs was remedied, and credit was once more placed on a sound foundation. The country went over from a copper to a silver standard, the assignats being converted at the rate of 3·50 roubles assignat to one rouble silver. The inconvertible paper currency was replaced by a metal currency, legally silver mono-metallism, but in reality bi-metallism, gold and silver being in the ratio of 1 : 15½. This continued from 1839-58, and was of material assistance to Russian credit.

The Crimean War, with the inevitable issue of credit notes, once again brought confusion into the national finances. Reutern, during his ministry, which lasted from 1860-70, did something to restore order, but the good results of his policy were nullified by the outbreak of the Turkish War. The result of the latter did not justify the expenditure which it involved, and the exchange rate of the rouble fell as low as 63·2 kopeks in 1879. The hostile attitude of England and France made the raising of foreign loans a matter of great difficulty, and practically the whole war was conducted on the issue of credit notes.

The havoc brought about in the national finances by these events was to a great extent remedied by the energetic administration of the three following Ministers of Finance, Bunge (1882-8), Vishnegradsky (1887-92), and Witte (1893-1903), but again the spell of prosperity was broken, this time by war in the Far East. The end of the disastrous Russo-Japanese War in 1905, found Russia with a hopelessly disordered financial system and an empty Treasury. From this state of affairs she was rescued in the same year by the conclusion of the largest foreign loan of her history.

As a result, we have the following statement of the total obligations of the Russian Empire on 1 January,

¹ Figures taken from the *Russian Bondholders' Manual*, Russian Ministry of Finance, London 1909, 1911, 1913.

	Roubles.
1. Public Debt :	
From 1817-1913, i.e. 96 years, 71 loans, of which 60 were for railways, amounting to.	8,841,723,912
Short Term Public Debt—	
Treasury Bonds	150,516,000
2. Obligations of the State Bank :	
Perpetual Deposits	64,263,004
3. Railway bonds and shares guaranteed, from 1885-1913.	
(a) Railways whose <i>Bond</i> capital was guaranteed by the State	1,741,490,298
(b) Railways whose <i>Share</i> capital as well is guaranteed by the State	28,000,000
4. Loans issued by State Institutions, and bearing therefore the guarantee of the State, from 1889-1913.	
(a) Nobles' Bank	823,770,400
(b) Peasants' Bank	1,237,543,495
Total	<u>12,887,307,495</u>
	i.e. £1,288 million approx.

Hence we see that the total obligations of the Russian Empire amounted to over £1,000 million sterling before the war; of this total the Public Debt itself accounted for over £800 million. Assuming that roughly 50 per cent. of the Public Debt was held abroad, her obligations to foreign powers and their nationals was approximately equal to £400 million sterling.

It may be of interest to insert on opposite page a table showing the position of Russia with regard to her National Debt, compared to the other countries of Europe. The figures refer to the year 1905.¹

It will be seen that although Russia stands second as regards the amount of her Debt, she is first as regards the amount of national income out of which the Debt must be met, and only fifth in the percentage relation of her Debt to her national income.

The movement of the National Debt during the period 1905-14 was particularly influenced by the effects of the

¹ Migulin, P. P., "The National Debt of Russia," op. cit., p. 63. Roubles converted into £'s sterling at the rate of 10 roubles = £1.

CURRENCY AND THE NATIONAL DEBT 119

Country.	Amount of Debt.	Expenditure on System of Credit.	Amount of State Income.	Percentage Relation of Expenditure on Debt to Income.
		In million £'s.	Sterling.	Per cent.
France	£1,131	£35	£135	30·96
Russia ¹	859	39	202	19·34
England	755	25	135	18·81
Austria-Hungary .	549	24	111	21·71
Italy	467	21	71	30·19
Prussia	334	13	122	10·78
Japan	223	11	37	30·00
U.S.A. . . .	173	4	135	3·47
Germany	169	5	102	5·17

Russo-Japanese War of 1904-6. The following figures show the increase in the Debt brought about by the exigencies of the war.²

Year.	Amount of the Debt in Million roubles.
1900	6·220
1905	
1910	
1911	9·014
1912	8·957
1913	8·858
1914	8·881

From 1911 onwards the financial embarrassments consequent upon the war and the subsequent domestic disturbances had evidently been overcome, and progress was being made in the reduction of the Debt.

The '80's of last century saw the creation of 4 per Cent. Government Rentes, since when the consolidation of the Russian National Debt has gone on steadily. But even in 1913 its composition was very heterogeneous. A glance through the pages of the *Russian Bond-holders' Manual* will

¹ "Report on the Budget for 1912," No. 5030 Annual Series, by Mr. H. O'Beirne, p. 8, gives £748·6 millions for 1 Jan., 1905, £828·8 for 1 Jan., 1906.

² Raffalovich, A., *Russia*, etc., p. 343.

give an idea of the different issues going to make up the Public Debt of Russia, conveniently summarized in a table for 1913 as follows.¹

Denomination of Loan.	No. of Loans.	Amount in Million Roubles.	Ratio to total (per cent.).
6 per cent.	2	38.4	0.4
5 " "	10	1,569.6	17.7
4½ " "	4	775.3	8.8
4 " "	45	5,530.3	62.7
3 " "	1	82.4	0.9
3½ " "	1	141.9	1.6
3 " "	9	486.9	5.5
Perpetual deposits	—	66.2	0.7
Exchequer Bills	—	150.5	1.7
		8,841.7	100

The loans were divided into three groups, namely, (1) those on short term, (2) on long term, (3) not redeemable at any fixed date. Short-term loans were in two categories : (a) Treasury Bonds of three to twelve months, of a minimum amount of 500 roubles (£50) ; and (b) Treasury Bonds of eight and four years, of a minimum amount of 50 roubles (£5). The long-term loans were issued under different conditions as to duration, e.g., 60 years, 81 years. Under the third group were loans such as those of 1817, 1820, and 1822, which could only be repaid by purchase on the Exchange. For loans in "rentes," like the 4 per cent. loan issued in 1894, the State reserved the right of repayment after notice. The loans were issued in Russian or foreign currency, according to the markets in which they were placed. They can also be divided as to whether they were contracted before or after the currency reform of 1897. If contracted previously, they were issued in metallic roubles, equal to one-tenth of an Imperial ; if later, in roubles equal to one-fifteenth of an Imperial. On 1 January, 1914, loans

¹ Raffalovich, A., *Russia*, etc., p. 344.

of the first kind amounted to 2,857,000 roubles, and of the second 5,953,000,000 roubles.

The importance of the rôle of foreign capital in the Russian financial system may be taken for granted. But its absolute predominance over home capital as an element in the National Debt and a factor in the economic development of the country may fairly be called in question. That absolute predominance is postulated by Mr. J. M. Keynes,¹ who declares that the equipment and organization of Russia's labour forces, rendered imperative by the pressure of her constantly increasing population upon her natural resources, was carried out for her by Western European countries, in the shape of advances amounting to £1,000 up to £1,500 million sterling in the 25 year period preceding the war. According to the calculations of Dr. Ischchanian,² the total sums invested by the rich industrial states of Western Europe in the poor agrarian state of Russia amounted to £720 million sterling. He estimates that £100 million of this was invested in private business concerns, while another economist, Mr. Ziv, puts this figure at £150 million. Dr. Ischchanian states that from 1769 to 1909, Russia approached the foreign money market seventy-two times, i.e. on an average once every two years. According to Prof. Ballod³ two-thirds to three-quarters of Russia's State Debt was held abroad in the year 1905.

Figures from more recent sources, however, would seem to indicate that, however deeply Russia may have been indebted to foreign capital for her earlier development, there was a perceptible tendency in later years for her to rely increasingly upon home resources, although this tendency had not attained to any considerable proportions before the war.⁴ Foreign financial aid was essential while Russia remained a purely agrarian state, and later on while she was endeavouring to establish her national industries

¹ Article on "Russia," *Manchester Guardian Commercial*. Reconstruction of Europe. No. 4.

² Ischchanian, Dr. B., *op. cit.*

³ *Ibid.*, pp. 204 and 205. *Vide Schmoller's Year Book*, 1905, Vol. 4, pp. 464-5.

⁴ Appendices A, B, C, for figures illustrating this tendency to emancipation from dependence on foreign financial assistance.

on a firm foundation. As a consequence, however, of the ever-increasing industrialization of the country, the development of banking, and the growth of the internal money market, Russia was able to revert to home resources more than she had been able to do in the past.

State funds, or State-guaranteed securities in circulation on 1 January, 1909, amounted to 11,410 million roubles,¹ of which the National Debt itself accounted for 8,850 million roubles. Of these 11,410 million roubles, 5,151 million roubles were held in Russia. On 1 January, 1912, according to the Report of the Audit Ministry, Russia had 2,728 million roubles of foreign debt, and 4,586 million roubles of home loans.² The latest inquiry was made in 1913, in 3,672 credit institutions, as a result of which it was established that on 1 January, 1914, 48 per cent. of the Public Debt was visible in Russia. But some issues, for example Treasury Bonds, certificates of Perpetual Deposits, etc., almost exclusively placed in Russia, were not visible in the credit institutions, since the holders kept them in their own possession. It might therefore be concluded that Russia was absorbing an increasing part of her Debt, and taking account of unregistered bonds, it might be said that more than half of it was held within the country.³

The question as to which were the principal foreign markets to which Russia applied in the accumulation of her large foreign indebtedness cannot be considered apart from the question of the political situation among the Great Powers of Europe in the half century preceding the Great War. In its origin, as has been already noted, the Russian National Debt was contracted mainly with Dutch and Italian bankers. In the course of the nineteenth century, however, she came increasingly under the financial tutelage of her more highly developed neighbour Germany. This was broken by Bismarck's attack on the Russian financial system in 1887. At his instigation, the German Press circulated dire prophecies as to the approaching

¹ Raffalovich, A., *Évolution budgétaire en Russie*, Paris 1910, p. 233.

² Raffalovich, A., *Russia*, etc., p. 345.

³ Raffalovich, A., *La Dette publique russe*, Paris, 1922, p. 9.

bankruptcy of Russia, as a consequence of which a panic was produced among German holders of Russian stocks. The latter were thrown upon the market in great quantities, to be immediately bought up on very favourable terms, mainly by French and Dutch investors. The 4 per cent. loan of 1888, mainly subscribed for in France, marked the beginning of the Franco-Russian entente, which continued up to 1917, and which was designed to act as a counterbalance to what France looked upon as Germany's design to secure the hegemony of Europe.¹ At any rate it secured Russia access to the rich French money market, which privilege was taken advantage of to such an extent, that by 1906 it was calculated that France had sunk 12 milliards of francs (i.e. almost £500 million sterling) in Russian investments; 10½ milliards in funds of the Russian State, and 1½ milliards in industrial securities.² The large loan floated in 1906, on the conclusion of the Russo-Japanese War, which amounted to £84,375,000, was brought out mainly on the French and English markets. Germany's withdrawal, after the plans for the loan had been drawn up, was explained by Count Witte as an act of revenge for the settlement of the Algeciras Conference in favour of France.

Up to the early years of the present century, England did not figure very prominently as a lender to Russia, since it was only in the year 1907 that the formation of the Anglo-Russian entente inaugurated a period of better understanding in the political sphere, between Russia and England. A considerable number of Russian Government loans were quoted on the London Stock Exchange,³ as well as on the Exchanges of France, Germany, Austria, Holland, etc., the total amount outstanding up to 1909 being about £570 million sterling. But it is not possible to ascertain what proportion was actually held in England. After 1909, a considerable stimulus was given to English invest-

¹ *Vide* files of *The Times*, November, 1888; also Raffalovich, A., *Les Finances de la Russie*, 1887-9, Paris 1889. Preface on the political and financial rapprochement between France and Russia.

² *La Revue des Revues*, 1906, "La France et les finances russes" by "Un ami de l'Alliance."

³ Appendix D. List of Loans quoted on the London Stock Exchange from 1822-1909.

ment in Russia, particularly in railway loans guaranteed by the Russian Government. About £10 million was thus invested between 1909 and 1911, with an additional £3 million in Russian municipal bonds.¹

¹ Appendix E. List of Russian guaranteed Railway and Municipal Bonds issued on the London market 1909-13.

CHAPTER VII.

THE STATE BUDGET.

THE Budget reforms of 1862 were part of the general reform movement following upon the liberation of the serfs, and mark the beginning of the modern era in Russia's financial system. The Budget of 1863 was the first to be introduced on the new basis. Since that date, the general development of the country along economic, political, and cultural lines, caused a constant increase to take place in the Budget totals, on the side of both revenue and expenditure.

REVENUE.

The totals of ordinary¹ State revenue for the years 1904-14, were as follows:

1904 . . .	2,018 million roubles
1905 . . .	2,024
1906 . . .	2,271
1907 . . .	2,342
1908 . . .	2,417
1909 . . .	2,526
1910 . . .	2,780
1911	2,951
1912	3,105
1913	3,240
1914	3,521

¹ Figures taken from "The Proposed Budget of the Empire, with the Explanatory Memorandum of the Minister of Finance," Petrograd, 1907, etc. The Budget was divided into "ordinary" and "extraordinary" expenditure and revenue, "ordinary" being annual recurring revenues and charges, the "extraordinary" being temporary or unusual. The Decree of 4 June, 1894, determined exactly which expenditure was to be entered in the Budget as "extraordinary"; it was to include expenditure on railways, war, military expeditions, national disaster (e.g. famines, epidemics), repayment of loans before due date, compensation paid to individuals or companies for the expropriation of various enterprises. *Vide* Raffalovich, A., *L'évolution budgétaire en Russie*, Paris, 1910.

The most marked feature of the above table, is the steady increase in the amount of the annual revenue, in spite of the troublous times through which Russia passed in the first few years of the period, including the Japanese War, 1904-6, and the revolutionary movement of 1905-6. The following were the various sources of revenue.¹

Direct Taxes.

Included in the above were: land taxes levied on private land; the tax on buildings in towns and boroughs; the hearth tax in the boroughs and villages of Poland; the "kibitka," or tent tax, in the Transcaspien provinces of Sir-Daria, Ferghana, Samarkand, Akmolinsk, Semipalatinsk, Uralsk, and Turgai; rent on land from the reserves of State Land allotted in perpetuity to settlers; State inhabited house tax; tax on commerce and industries; tax on interest on capital. There were two sections of the tax on industries, namely, a basic tax (licences), and a supplementary tax on undertakings not obliged to publish balance sheets, consisting of a tax on the capital, and on the net profits. There was also a supplementary tax on undertakings not obliged to publish balance sheets, consisting of a licence duty, and a percentage tax on excess profits above a certain fixed limit. The tax on pecuniary capital was levied on income derived from securities, deposits, and accounts current at banks, and also, after the outbreak of the war, on private mortgages. The following table on opposite page shows the movement of direct taxes during our period: ²

The rapid increase in the yield of the tax on commerce and industries shows the progress that was being made in the industrialization of the country. A movement was on foot for the reconstruction of the system of direct taxation, by the introduction of an income tax, and the increase of the

¹ *Svod Zakonov*, Vol. V, edition 1903, with continuations up to 1910, Vol. VI, edition 1905, with continuations up to 1910: these give the laws referring to the various taxes.

² Unless otherwise stated, the figures given in this section are taken from Raffalovich, A., *Russia*, etc., p. 329 *et seq.*

	1903.	1909.	1913.
	Million Roubles.		
Taxes on land and other real estate ; rents and other receipts from real estate	49	71	87
Tax on commerce and industries . .	67	104	150
Tax on pecuniary capital	17	23	35
Total	133	198	272

succession duties, but this was nullified by the outbreak of the War in 1914.¹

Indirect Taxes.

Excise duties were levied on articles of popular consumption such as spirits, tobacco, sugar, etc. The receipts for the period 1903-13 were :

	1903.	1909.	1913.
	Million Roubles.		
Excise on spirits, beer, mead and yeast	34	40	53
Tobacco excise	49	45	78
Excise on cigarette tubes	—	3.5	4.8
" " sugar	75	107	149
" " petroleum products . .	32	41	48
" " matches	8	17	20 ²
	189	265	353

The articles taxed were widely consumed, therefore the receipts increased with the growth of the population, the concentration of the population in towns, and improvements in means of communication.

It was questioned by some critics as to whether the in-

¹ For proposed alterations, *vide* speech of Mr. Kokovtsev, Minister of Finance, when introducing the proposed Budget for the year in the Third Duma, 27 November, 1907.

² Corrected totals are, 198 million roubles for 1903, and 253.5 million roubles for 1909.

creased yield from the above taxes might be taken as proof of an increase in general prosperity.¹ It was held that the increased prosperity was only obvious with regard to the urban population, and that the higher indirect taxation simply made it necessary for the peasant to spend all his income on necessities. The burden of the Land Redemption payments, which weighed heavily upon the peasants, was removed by their abolition in 1907.

Indirect taxes also included Customs Revenue receipts, although most of the duties were protective rather than fiscal in nature. In 1903 the Customs revenue receipts were 242 million roubles, in 1909, 274 million roubles, and in 1913, 353 million roubles.

Duties.

These included revenue stamp duties, stamp duties on legal documents, registration fees, death duties, duties on the transfer of property, port dues on ships and cargoes, duty on fire insurance, special tax on passenger fares, and on freight carried in passenger trains. These duties were closely connected with the economic life of the country, as showing the number of business transactions carried out, and their yield gives, therefore, a particularly clear idea of the commercial and industrial development of Russia. An increase in the receipts was sometimes artificially brought about by a rise in the rates of the duty. Relevant figures are as follows:

	1903.	1909.	1913.
	Million Roubles.		
Revenue stamps and registration fees	49	75	112
Transfer of property	25	33	48
Port dues on ships and cargoes . . .	3	4	11
Tax on passengers and freight . . .	17	24	31
Insurance duties	4	5	7
Miscellaneous	9	13	22
	107	152	231 ²

¹ Ozerov, *Economic Russia*, etc. (R.), p. 148.

² Corrected figure for 1909 = 154 million roubles.

Royalties.

These included the revenue from Mining, the Mint, the Post Office, Telegraphs and Telephones, and the Government Spirit Monopoly receipts. The latter played by far the most important part, reaching a total of almost one milliard roubles prior to the war. The movement of Royalty receipts was as follows :

	1903.	1909.	1913.
	Million Roubles.		
Mining revenue	0·3	0·08	0·6
Mint	5·5	7·0	5·0
Postal receipts	37·0	58·0	79·0
Telegraph and telephone revenue .	21·0	30·0	41·0
Spirit Monopoly	542·0	719·0	899·0
	605·8	814·08	1,024·6

These totals were entered in the Budget as gross receipts, the net revenue being considerably less.

Although the increase in the Spirit Monopoly receipts may in part be traced to the extension of the monopoly to new districts, a marked increase in consumption must also be taken as one of the causes. Since drunkenness was becoming a serious social evil in Russia, it is evident that the State, by deriving such a considerable part of its revenues from the sale of liquor, was placed in an anomalous position. On the one hand, pressing financial needs urged the facilitating of the sale of spirits, and thus the increase of the revenue receipts ; on the other hand regard for the national welfare urged the repression of drunkenness by such measures as the giving of grants to temperance societies and so on.¹

Property and Funds belonging to the State.

In Russia the State was a very considerable landowner, and also took a large share in the direction of undertakings

¹ Simpson, Prof. J. Y., *The Self-discovery of Russia*, London, 1915. Chapter on the drink question.

which in England are more usually found under the control of private individuals, or of companies. The State possessed large estates, also oil-fields, gold-mines, salt and mineral springs, collieries, fisheries, sealing-grounds, and very extensive forest areas. Revenue was derived from these, either by direct exploitation, or by leasing the property concerned to private persons or institutions. Another important section of State property was the railway net, partly built by the State itself, and partly expropriated by the State from joint-stock companies. In addition to this, the State received a share in the receipts of such joint-stock railway companies as had built their railroads by money either borrowed under Government guarantee, or advanced from the Treasury. Further sources of revenue were, State mills and works, which worked partly for the Government, and partly for the open market. The State also received revenue from the operations of the State Banks, particularly from the State Bank of Russia. The following table shows the relative importance of these receipts :

	1903.	1909.	1913.
	Million Roubles.		
Rents and leases	24	32	41
Forests	62	64	92
State railways	453	568	813
State mills and works	11	14	26
Interest on funds and banking operations	17	28	45
Share of the State in the profits of joint-stock railways	2	2	27
Annuities from railway companies	12	13	21
Reimbursement of loans and advances	55	76	80
Total	636	797	1,145

EXPENDITURE.

The expenditure side of the Russian Budget also showed a continual increase, during the period 1900-13, as may be seen from the totals of ordinary and extraordinary expenditure in these years :

1900	1,889 million roubles.
1905	3,204
1910	2,596
1911	2,845
1912	
1913	

The expenditure mounted rapidly during the early years of the century, owing to the expenses of the Russo-Japanese War. Later expansion may be traced to the continual development of State undertakings. Of these, the most important were the State railways, and the Government spirit monopoly, the gross revenues and expenditures connected with which were entered in the Budget. Regard must also be paid to the increase of population, and the increasing expenditure on the cultural requirements of the country, including land reform and public education.

Before the institution of the Duma, it was difficult to trace the exact amount of expenditure on any particular State requirement, since the general expenditure was distributed among the separate Ministries. Later, however, supplementary tables were given, showing the distribution of the State expenditure according to particular requirements. The figures for 1903 and 1913, arranged according to the latter system, were as follows :

	1903.		1913.	
	Million Roubles.	Per cent.	Million Roubles.	Per cent.
1. General administration .	327.4	17.4	503.0	16.4
2. National debt . . .	288.7	15.3	402.8	13.1
3. Army and Navy . . .	466.3	24.8	816.5	26.6
4. Productive expenditure .	213.7	11.5	519.2	16.9
5. State undertakings . .	586.9	31.2	828.5	27.0
	1,883.0	100.2	3,070.0	100.0

The increase in the total expenditure as shown above was 63 per cent., the largest increase being under the headings

132 THE ECONOMIC DEVELOPMENT OF RUSSIA

of "Productive Expenditure" and "Army and Navy."¹

Extraordinary expenditure included the construction and installation of new railways, expenditure on war or national disaster, the redemption of State loans before their due date, and the expropriation of various undertakings. During the period 1903-13, over four milliards of roubles were expended on the following aims :

	Million Roubles.
Russo-Japanese War	2,242 ²
Construction of railways . . .	763
Expropriation of railways . . .	32
Other railway expenditure . . .	91
Construction of ports	24
State defence	455
Military expeditions to China and Persia	20
Redemption of loans before due date	199
Expenditure entailed by bad harvests	403
Miscellaneous expenditure . . .	47
	<hr/>
	4,476

A considerable part of this expenditure was incurred in connection with the Russo-Japanese war, and the expeditions to China and Persia (2,462 million roubles). Deducting this latter sum, it will be seen that the extraordinary expenditure in time of peace during the period 1903-13 amounted to 2,014 million roubles, of which 1,412 million roubles, i.e., 70.1 per cent., was covered by the excess of ordinary revenue over ordinary expenditure, or by the "free balance" of the Treasury.

This "free balance" of the Russian Treasury, which was

¹ Amount expended by Russia on armaments, 1908-13 : "Explanatory note to the proposed Budget for 1913," p. 94.

	Total Expenditure. Million Roubles.	Increase since 1908.
1908	612.2	—
1909	650.1	37.9
1910	647.6	35.4
1911	669.3	
1912	738.7	126.5
1913	866.1	253.9
	<hr/>	<hr/>
	4,184.0	510.8

² This sum is increased to 3,016 million roubles if the expenses of the loans connected with the war are added.

utilized every year to make good deficits which would otherwise have arisen in the Budget, was the subject of considerable adverse criticism, particularly by foreign writers.¹ The actual amount of the free balance was arrived at each year by a calculation on 1 January, of the amount of actual cash in hand in the treasuries of the Ministry of Finance : ² to this were added sums in transit, i.e., amounts sent from one office, and not yet received by another. From the total thus arrived at were deducted all credits granted but not yet assigned, i.e., all expenditure foreseen in earlier estimates, but not yet carried out, which might therefore require means to cover it. The sum remaining at the conclusion of these calculations was a really free balance, in the sense that it was not bound by any obligations of the State Treasury. To decide the amount of the free balance at the end of the year, the amount by which the actual revenue for the year had exceeded expenditure was added to the free balance as calculated at the beginning of the year : conversely, any excess of expenditure over receipts was deducted. The increase or diminution of the amount of the free balance in any year depended therefore on the excess of receipts over expenditure or vice versa.

The amount of the free balance in each year from 1901-1911 was as follows : ³

	Million Roubles.
1901	105
1902	268
1903	257
1904	381
1905	61
1906	- 158
1907	58
1908	8
1909	1.8
1910	107
1911	305 (estimated figure)

¹ Drage, G., *Russian Affairs*, p. 282 *et seq.* Also the weekly *Promyshlennyi Mir (Industrial World)* (R.), January, 1901.

² Proceedings of the Duma (R.), 25 January, 1912, p. 882, speech of Kheritonov. Also Witte, Report on the Budget for 1901, quoted in Drage, *op. cit.*, 1.c.

³ Proceedings of the Duma (R.), 21 February, 1911, p. 2380, Mr. Kokovtsev in his Budget speech.

The effect of the Russo-Japanese War and the subsequent internal revolutionary movement is clearly reflected in the diminution of the free balance to 61 million roubles in 1905, and its replacement by a deficit of 158 million roubles in 1906. In later years, however, the free balance showed a tendency to recover, and had almost regained the pre-war level in 1911.

It was difficult to analyse the exact disposition of the free balance, since some of the objects to which it was applied belonged to the realm of "protected" expenditure, and did not come under the cognisance of the Duma. From 1909-11, however, it was calculated that the free balance amounted to a total of 456 million roubles,¹ and that it was expended on the following objects: (1) the redemption of Treasury notes, (2) the expropriation of the Warsaw-Vienna railway, (3) the building of ports, (4) the relief of the population in famine-stricken areas, and (5) expenditure on national defence.

It was argued that the maintenance of a free balance was a psychological necessity in an agricultural country like Russia, where the national revenue was entirely dependent on the caprice of "His Excellency the Harvest."² It was quite impossible to foretell accurately what the results of the harvest would be. It might be possible for the Minister of Finance, when introducing the Budget in any year, to gauge from preliminary information the probable return of the winter crop; but nothing could help him to foresee the harvest of spring-sown corn. Hence it was desirable to accumulate a reserve in years of good harvests in anticipation of the lean years, or to meet any case of special need. Thus the necessity of incurring short-term loans to meet temporary deficits would be avoided.

Further, the free balance was considered to be a "trump card" in the financial and political position of the State.³ It gave Russia added stability, and therefore greater bar-

¹ Proceedings of the Duma (R.), 10 May, 1913, p. 901, Speech of Mr. Aleksyenko, when presenting the Report of the Budget Commission.

² Mr. Kokovtsev, in his Budget Speech, 1911, l.c.

³ Proceedings of the Duma (R.), February, 1911, p. 2350, speech of Mr. Aleksyenko.

gaining power, when arranging loans with foreign States. Also, about half of the Russian National Debt was held abroad, and it was accordingly necessary to keep a reserve fund in order to check any panicky fall in Russian securities abroad.¹ The advantage of the possession of a free balance was demonstrated on the outbreak of the Russo-Japanese War, when Russia was able to meet the preliminary expenses of the campaign without having recourse to loans; and was afterwards able to conclude a loan on more favourable terms than would otherwise have been possible

A disadvantage of the policy of maintaining a free balance was that it introduced the dangerous principle that the large sums of money thus accumulated could be expended without the control of the representative body and at the sole discretion of the Minister of Finance. Count Witte in particular was accused of deliberately underestimating receipts, so that the larger amounts actually realized would increase the amount of the free balance, and hence of the sums at his sole disposal.²

In the year 1912, for example, 302 million roubles of the free balance were expended.³ Only 157 million roubles were expended subject to the decision of the State Duma and the State Control, leaving approximately 145 million roubles to be accounted for. About half of the latter amount was traced as having been spent on famine relief, construction of schools and churches, etc., but there was no clear indication as to how the remaining half had been disposed of. This system is in strong contrast to the rigid control exercised over all branches of expenditure in the presentation of public accounts in England. It can hardly be doubted that the accumulation of such large sums, the disposal of which was only partially controlled, provided a temptation for rash or wasteful expenditure.

¹ Witte, *Memoirs*, op. cit.

² *Vide The War with Japan*, by Gen.-Adj. Kuropatkin, for an attack on Witte on these lines. Witte replied in *Necessary Explanations to the Treatise of Gen.-Adj. Kuropatkin*, Moscow, 1911 (in French and Russian), showing that the free balance from 1894-1905 was really expended on pressing State needs, particularly railways.

³ Proceedings of the Duma (R.), 10 May, 1913, p. 901, speech of Mr. Aleksyenko, when presenting the Report of the Budget Commission.

In the second place, it was open to question whether the origin of the free balance was to be traced to the natural increase of the revenue of the country, or whether it really depended on foreign loans.¹ In the latter case, it could not be taken as an indication of financial stability and prosperity, but was simply a form of disguised borrowing.

The System of Taxation.

The general system of taxation found many critics in Russia. The first point of attack was the lack of elasticity in the system; it remained practically unchanged during the period under review, while the country was passing through great and rapid changes, especially in the industrial sphere. The following table shows that alterations in the sources of the State revenue were not very perceptible during the period 1903-13:

	Million Roubles.			
	1903.		1912.	
		Per cent.		Per cent.
Direct taxes	135	6.6	243	7.8
Indirect taxes	440	21.7	650	20.9
Duties	107	5.2	199	6.4
Royalties	607	29.9	943	30.4
Property and funds belonging to the State	571	28.1	937	30.2
Land redemption receipts . .	89	4.4	—	—
Miscellaneous	83	4.1	132	4.3
Total	2,032	100.0	3,105	100.0

The critics of this aspect of taxation usually based their arguments on broad theoretical grounds, and did not make sufficient allowance for the practical difficulties in the way of introducing changes in the taxation system. The uncertainty and disturbance introduced into the

¹ Drage, G., *Russian Affairs*, p. 284.

world of commerce and industry by any sudden alteration would react unfavourably upon the national revenue, and upon the economic life of the country. Therefore any change had to be carefully considered before it was projected.

The great preponderance of indirect taxation, which laid a disproportionate burden on the poorer classes, was also a subject of criticism. In the year 1907, Russia derived 50 per cent. of her income from indirect taxation, and only 7.5 per cent. from direct taxes.¹ Among the indirect taxes, the social anomaly of the spirit monopoly receipts figured prominently.

The preponderance of indirect taxation was not so much the real problem, as the poverty of the peasants upon whom that taxation fell. Considered from the point of view of taxation per head, the Russian peasant was the least heavily taxed man in Europe; but in proportion to his ability to pay, the most heavily taxed. No outward reform of the taxation system would have been of any avail until the fundamental problem of raising the economic status of the peasantry was successfully solved.

The question as to whether Russia was ripe for a radical reform of her taxation system on the basis of the income tax, taking England as her model, is one to which a solution does not readily present itself. In a problem of this description, the psychological factor is one of great importance. It has to be remembered with what diffidence the income tax was introduced into England, the indignant opposition which it encountered, and the time required before it became an integral part of the taxation system. It is therefore very doubtful what would be its reception, and what would be the measure of its success in Russia, where the bulk of the

¹ Proceedings of the Duma (R.), Kokovtsev, Budget Speech for 1907 l.c. He gives comparative figures for other countries to show that Russia did not, in this respect, differ very much from Western European countries which enjoyed a much higher level of development and culture. As regards indirect taxation, the figures for 1907 were: Russia 50 per cent., Great Britain 52.8 per cent., France 52.4 per cent., Italy 45 per cent., Germany 42 per cent., Norway 43 per cent., Spain 51 per cent. The figures for direct taxation were: Russia 7.5 per cent., Great Britain 21 per cent., Prussia 8 per cent., Austria 5 per cent.

population is made up of a peasantry of a very low cultural level.¹

The claim was raised that the middle or propertied classes should bear the brunt of the taxation burden, rather than the poorer classes. But in Russia, the middle class was numerically weak, and quite unable to satisfy the pressing needs of the State. Hence the State found itself in the anomalous position of basing a modern system of economic development upon a backward system of revenue-raising.

At the beginning of the period 1905-14 the Russian fiscal system had to contend with two main difficulties, the very considerable expenditure entailed by the war with Japan, and the shock to the whole economic and financial structure of the country by the subsequent internal disorders. These two catastrophes seriously endangered the financial stability of the country, and even threatened the security of the gold standard of currency.² The national finances were, however, successfully re-established, mainly by the conclusion of the 1906 loan, and subsequent improvement was shown in the progress made in Debt reduction from 1910 onwards.

A further embarrassment was the gap left in the National Treasury by the renunciation of the Land Redemption Annuities, involving an annual loss of about 80 million roubles. This may be traced to the silent but obstinate pressure of the peasantry upon the Government. They never fully realized that the Government had any right to make them pay for the land. In the old days of serfdom, their attitude towards their masters was expressed in their belief that, "We may belong to you, but the land belongs to us."³ This deep-rooted belief persisted after the Emancipa-

¹ The Soviet Government introduced the Income Tax by a decree of 16 November, 1922: as yet, however, it plays a comparatively insignificant rôle in the national system of revenue-raising, owing to the poverty of the population. It is noteworthy that present-day Russia draws 60 per cent. of her taxation revenue from direct sources as compared with the pre-war figure of 7·5 per cent., showing a radical alteration in the basis of her revenue-raising system.- *Vide* "Taxation in Soviet Russia" in the *Slavonic Review*, June and December, 1925, by M. S. Miller.

² Admitted by Witte in his *Memoirs*, and by Kokovtsev in his 1907 Budget speech. The opponents of the Russian financial system, Cyon, Bonzon, Wolff, etc., held that these events permanently weakened the financial structure of Russia.

³ Sir Donald MacKenzie-Wallace, *Russia*, Vol. II, p. 167.

tion in their conviction that the land ought to be handed over to them without payment. The cancellation in 1907 of the Land Redemption Annuities was the Government's final capitulation to this conviction.¹

LOCAL ADMINISTRATION.

In Russia, local taxation was in the hands of the local administrative bodies, the Zemstvos, which were established in 36 provinces of the Empire by the Statute of 1864, and later created in other provinces as well. They were instituted as a result of the necessity of reorganizing the provincial administration after the Emancipation of the serfs in 1861.² They marked an interesting tendency towards a solution of the conflict of interests between the Government and the people, since they provided the possibility of greater individual initiative among the people, in local affairs at least. This same tendency was remarked in the transition of the peasantry to the individual form of landholding, and the growth of co-operative institutions.³ But, as will be seen, the tendency was hindered in its development by the friction which arose between the Central and Local authorities.

The Zemstvo was defined as : ⁴

" A local administration which supplements the action of the rural communes, and takes cognisance of higher public wants, which individual communes cannot possibly satisfy. Its principal duties are to keep roads and bridges in repair, to provide means of conveyance for the local police and other officials, to look after primary education and sanitary affairs, to watch the state of the crops and take measures against approaching famines, and, in short, to undertake, within certain clearly defined limits, whatever seems likely to increase the material and moral well-being of the population."

The Zemstvo was Parliamentary in form, consisting of an assembly of deputies which met every year, and a permanent

¹ Pares, Sir Bernard, *Russia in Reform*, London, 1907.

² Ashley, Sir Percy, *Local and Central Government*, London, 1905. According to the principles of classification adopted by the author, the Russian Zemstvo corresponds to the Prussian local administrative body in type.

³ *Vide* Section 3, " Finance," pp. 80, 81, 89.

⁴ Sir Donald MacKenzie-Wallace, *Russia*, Vol. II, Chap. 32.

executive bureau ("uprava") elected by the assembly from among its members. Once every three years the deputies were elected in certain fixed proportions by the landed proprietors, the rural communes, and the municipal corporations. Every province ("gubernia"), and every district ("uyezd") into which the province was divided, had such an assembly and bureau.

Very exaggerated hopes had been aroused, particularly in Liberal circles, by the creation of the Zemstvo. An enormous increase of popular liberty, and of interest among the people in public affairs, was looked for, as well as great material advances, improvements in roads, bridges, education, sanitation, agricultural methods, and so on. It was not realized that the mere creation of such a body could not, in a short time, revolutionize local life, and keen disappointment was felt and expressed when the Zemstvo failed to realize the wonders expected of it. This comparative failure was ascribed by its partisans to the restrictions imposed upon it by the Imperial Government. The respective spheres of the Central and Local Governments never having been clearly defined, there inevitably arose friction between the two. The Imperial Government thought it saw, in the constant inclination of the Zemstvo to extend its activities, an attempt to infringe upon its own authority. Hence it endeavoured to curb these aspirations at their beginning, and control the Liberalism and insubordination of which it considered the Zemstvo was becoming the centre. The local authorities were put more and more under the control of the provincial Governors, and a reorganization was effected by the law of 1890, whereby the number of delegates in the assemblies was reduced by almost one quarter, and the relative strength of the different social classes in them was altered. By the old law, the proportion between the noblesse and the peasantry had been 42 per cent. to 38 per cent.; this was now altered to 57 per cent. to 30 per cent. without, however, having much effect in making these assemblies more tractable.

The Constitutional Reform of 1906 modified the attitude of the Zemstvos towards the Government, by introducing a

fundamental change in the various elements making up these local administrative bodies. Previously the propertied classes ("tsenzovyi elementy"), who directed the activities of the Zemstvos, and the so-called "third element" ("tretiyi clement"), i.e., the salaried staff of the Zemstvos, doctors, nurses, teachers, etc., had formed a united front in demanding reforms from the Government. But the introduction of representative government, by the law of 23 April, 1906, broke this unity of front. The franchise was based upon the propertied class, the members of which henceforth became identified with the moderately progressive policy of the Government. Only a few of its members joined hands with the "third element" and the various democratic and socialist bodies in the country. Along with these, they continued to demand reforms, on the lines of a wider field of independent action in local affairs, and the introduction of a smaller local unit than the Zemstvo itself, in order to enlist the co-operation of the peasants in local activities.

Little was accomplished in the political sphere during this period, since the separate Zemstvos could not do much, and the Government resolutely set its face against concerted action through the formation of a National Zemstvo Assembly. It was only on the outbreak of the recent war that the dire necessities of the time swept away all opposition, and the Zemstvos were allowed to form a national organization for carrying out tasks in connection with the provisioning of the troops, providing for the dependants of soldiers on active service, looking after wounded and disabled men, and allied activities.

This conflict between the Central Government and the Local Administrative bodies coincided with two main tendencies of development, the first towards the gradual assumption by the Imperial Government of duties previously supposed to devolve upon the local bodies;¹ the second towards the increasing dependence of the latter upon financial assistance from the State Treasury. Thus by 1913 Grants in Aid from the Treasury to the Zemstvos amounted to 47·2

¹ Appendix A, List of laws concerning the Zemstvos, passed between 1895 and 1912, illustrating this tendency.

million roubles, or one-sixth of the total Zemstvo expenditure.¹

Figures showing the expenditure of the Zemstvos on their various activities, arranged as percentages of their total expenditure, show the importance of the proportion assigned to the cultural needs of the population.²

ZEMSTVO EXPENDITURE.		1912. Per cent.	1913. Per cent.
1. Participation in the expenditure of Government Institutions		4.6	4.2
2. Maintenance of Zemsky Administration—staff, premises, statistics, joint expenditure with other Zemstvos		7.1	6.8
3. Construction and maintenance of places of confinement		0.6	0.6
4. Keeping up of roads, and formation of a road fund (Law of 1 June, 1895)		7.8	7.4
5. <i>Public Education</i>		29.4	31.0
6. Poor Relief		1.7	1.5
7. <i>Medical Dept.</i>		25.1	24.6
8. Veterinary Dept.		2.8	2.8
9. Measures to improve economic conditions in general		6.3	7.6
10. Redemption of Debts		5.9	6.0
11. Miscellaneous		2.9	3.0
12. Assignments to definite funds		3.2	2.9
13. „ „ Reserve capital		1.6	1.5
14. Minor items		0.2	0.1
		<u>100.0</u>	<u>100.0</u>

Total expenditure for 1912 . 250,158,600 Rs. (£25 mill.)

„ „ „ 1913 . 290,560,900 „ (£29 „ „³

¹ Appendix B, figures showing the sources of revenue at the disposal of the Zemstvos in 1913. A direct comparison with England is not possible, since the systems in the two countries differ so completely. But it may be remarked that this same tendency to the increase of Exchequer grants is also noticeable in English local finance, as the following figures demonstrate:

Summary of Exchequer Grants received by Local Authorities in England and Wales, excluding London.

1892.	1902.	1912.
£6 million.	£10 million.	£18 million.

Vide Sir Robert S. Wright and the Rt. Hon. Henry Hobhouse, *An Outline of Local Government and Local Taxation in England and Wales*, 4th Edition, 1914, Table C, p. 176.

² *Messenger of Finance*, No. 2, 1914 (R.), pp. 48-9.

³ The total expenditure of Local Authorities in England and Wales, excluding London, for 1911, amounted to £106 million. Wright and Hobhouse, op. cit. Table B, p. 175.

A more general grouping of the expenditure of the Zemstvos for the same two years gives the following results :

<i>Expenditure.</i>	Totals for 40 Governments. Percentage to total expenditure.	
	1912.	1913.
1. Obligatory (imposed by law)	1·8	1·8
2. Unavoidable	13·2	12·8
3. <i>Cultural needs</i>	66·2	67·6
4. Economic needs	16·4	15·3
5. Miscellaneous	2·4	2·5
	<u>100·0</u>	<u>100·0</u>

Obligatory expenditure included the share of the Zemstvos in the support of Government Institutions, the construction of places of confinement, and so on. This was lessened by the Law of 5 December, 1912, by which the travelling expenses of police and other officials, and the construction of places of confinement, were assumed by the State. Unavoidable expenditure was incurred mainly for the support of the Zemstvo administration, salaries and pensions of the staff, payment of rent for premises, etc. The large percentage spent on cultural needs included expenditure on education, medical assistance, economic and veterinary measures, poor relief. The amount spent in these ways, particularly on education and medical assistance, was made the point of attack by some critics, who maintained that more ought to have been spent on practical needs, such as the improvement of roads and bridges and of agricultural methods. Others, however, held that the best way to assist the peasantry was to give them decent conditions of life by the organization of medical assistance, and to raise their level of culture by the spread of education.

The increase in local rates was rapid and continuous. In 1865, just after the institution of the Zemstvos, they amounted to 5·7 million roubles ; by the beginning of the twentieth century they had increased to 88·3 million roubles, and by 1913 they reached the sum of 253·8 million roubles. The Law of 12 June, 1900, attempted to check this rapid growth by limiting the annual increase in rates to 3 per

cent. But in practice the law was ineffective, since liberal exceptions were allowed.¹

MUNICIPAL FINANCE.

Towns, although represented in the Zemstvos, were independent units, and had their own system of municipal government. The constant increase in their activities can be traced in the steady rise in municipal revenue, which amounted to 21 million roubles in 1871, the year in which municipal revenue was reorganized, and which had increased to 276 million roubles by the year 1913.²

Russian towns undertook a considerable number of municipal enterprises, from which a large proportion of their income was derived. These enterprises included electric tramways and lighting, transport service by land and by water, insurance, pawnshops, banks, slaughter-houses, water-supply, canalization, bakeries, drug-stores, saw-mills, cold storage, etc. The sources from which towns derived their income, and the objects to which their expenditure was directed, will be made clear by a consideration of the budget of one of their number.³

THE BUDGET OF KHARKOV FOR 1914.

<i>Income.</i>	In 1,000 Roubles.	
		Increase compared with 1913.
	1914.	1913.
1. Taxation of land values ⁴	808	173
2. Taxes on trade and industry	280	19
3. Carriage tax and dog licences	19	—
4. Duties	25	3.5
5. Town property and property let on lease	1,093	36
6. <i>Town undertakings</i>	3,066	375
7. Grants to town and return of expenditure	1,919	687
8. Miscellaneous	41	4
Total	<u>7,251</u>	<u>1,297</u>

¹ Appendix C, Increase in local rates, 1865-1913.

² Appendix D, Growth of municipal revenue from 1871-1913.

³ *Messenger of Finance*, No. 24, 1914 (R.), p. 530.

⁴ For details of municipal land values taxation, *vide* Sodoffsky, I, *Die Immobilienbesteuerung d. Kommunen Russlands*, Tübingen, 1892.

Expenditure.

	1914.	Increase compared with 1913.
1. Share in expenditure for maintaining State Institutions	40	34
2. Maintaining General and Trustee Courts	376	27
3. Obligation of billeting soldiers	600	37
4. Fire brigade and police	407	19
5. Town improvements	403	86
6. <i>Upkeep of town undertakings</i>	1,576	125
7. Public education	918	333
8. Charity	78	6
9. Medical, sanitary, and veterinary services	770	69
10. Payment of taxes	51	1
11. Upkeep of town property	254	23
12. Redemption of debt.	1,643	546
13. Formation of special capital	85	28
14. Miscellaneous	50	9
Total	<u>7,251</u>	<u>1,343</u>

The significance of municipal enterprises, on the Income as well as the Expenditure side of the budget, will be noted.

Increase of municipal indebtedness, both in home and in foreign markets, went hand in hand with the increase of town activities. The significance of Grants from the Treasury (Income, item 7) in the Budget of Kharkov, as well as the importance of the amount absorbed by the redemption of debts (Expenditure, item 12), needs no comment, and may be taken as characteristic of other towns as well.

As regards home indebtedness, it is to be noted that in 1913, 15 Municipal Bond Loans received Imperial sanction, to the total amount of 119 million roubles.¹ The State Bank also made considerable advances on behalf of local credit, most of which were enjoyed by the small towns. For the year 1913, these advances amounted to 13.2 million roubles.

The growing significance of the London market for Russian municipal loans is shown in the following list : ²

¹ Appendix E, List of Municipal Bond Loans sanctioned in 1913.

² Figures taken from the *Stock Exchange Official Intelligence*, 1914.

146 THE ECONOMIC DEVELOPMENT OF RUSSIA

Name of Town.	Original amount of Loan issued in London (in £)
Astrakhan (1910)	582
Baku (1910-13) .	622·3
Helsingfors (1909)	1,000
Kiev (1914)	655·7
Moscow (1908-9)	5,424
„ (1912) .	3,809·5
Nikolaev (1912) .	687·8
St. Petersburg (1913)	2,300
Saratov (1909) .	407·8
Tammerfors (1910)	
Vilna (1912) .	449·2
Total.	<u>18,300·6</u> = £18 million

Some of these loans, e.g., those of Baku, Kiev, St. Petersburg, were issued in London only : others in London and in other markets as well. It will be noted that all the loans date from 1908 or later, and were a manifestation of the quickened interest in Russian securities evident in England after that year, already noted in connection with State loans.

APPENDIX.

FINANCE.

1. Banking.

TABLE A.

Messenger of Finance No. 25, 1914 (R.), p. 556, "The State Bank in 1913."

Turnover and Net Profit of the State Bank, 1909-13.

Year.	Turnover (in Million Roubles).	Increase for Year.		Net Profit (Million Roubles).
		Absolute (Million Roubles).	As Per- centage.	
1909	162,324·4	13,777·4	9·3	18·7
1910	168,258·8	5,934·4	3·6	26·0
1911	186,001·6	17,742·8	10·5	26·4
1912	203,650·7	17,649·1	9·5	33·0
1913	234,009·3	30,358·6	14·9	42·2

TABLE B.

Ibid. Amounts given by the State Bank in discount and advance operations, 1909-13 (in Million Roubles).

	1909.	1910.	1911.	1912.	1913.
To Banks	1,004	1,931	3,209	3,533	4,530
Directly	873	1,050	1,249	1,326	1,448
To middlemen (excluding advance offices)	39	52	84	123	188
Total	1,916	3,033	4,542	4,982	6,166
Percentage of total advances enjoyed by—	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
Banks	52.3	63.3	70.7	70.8	73.4
Direct credits	45.4	34.6	26.5	26.7	23.5
Middlemen	2.3	2.1	1.8	2.7	3.1
	100.0	100.0	100.0	100.0	100.0

Analysis of Credits to Private Banking Institutions.

Credits remaining open on 1 January	Joint Stock Commercial Banks.			Societies for Mutual Credit.		Municipal Social Banks.		Total.	
	Banks.	Branches.	Amount of Credits.	No. of Institutions.	Amount of Credits.	No. of Institutions.	Amount of Credits.	No. of Institutions.	Amount of Credits.
			In Million Roubles.		In Million Roubles.		In Million Roubles.		In Million Roubles.
1910	33	253	215.5	233	42.1	125	15.6	644	273.2
1911	31	289	236.0	293	46.9	128	17.1	741	400.0
1912	32	335	407.3	382	57.5	135	16.2	833	481.0
1913	40	363	474.6	453	65.9	151	18.2	1,007	558.7
1914	43	363	519.5	504	72.2	161	19.7	1,071	611.4

TABLE C.

Messenger of Finance, No. 11, 1914 (R.), p. 515.

Increase of Capital, etc., in the Private Banks and the State Bank, 1900-12.

At end of Year.	Total of Capital, Deposits, Current Accounts.		Increase or Decrease for Year.
	Private Banks.	State Bank.	
	In Million	Roubles.	
1900	1,165	223	—
1901	1,180	239	+ 15
1902	1,257	292	+ 77
1903	1,395	286	+ 138
1904	1,464	310	+ 69
1905	1,340	319	— 124
1906	1,468	304	+ 128
1907	1,569	284	+ 101
1908	1,789	265	+ 220
1909	2,175	329	+ 386
1910	2,816	316	+ 641
1911	3,206	313	+ 390
1912	3,952	317	+ 746

Growth from 1900-12:

Absolute . . .

2,317 94

As percentage

198.9 42.1

150 THE ECONOMIC DEVELOPMENT OF RUSSIA

TABLE D.

Raffalovich A., *Russia*, etc., p. 366.

Unutilized average Right of Issue in various European Banks.

Year.	Russian State Bank (in Million Roubles).	Bank of England (in Million £ Sterling).	Banque de France (in Million Francs).	Reichsbank (in Million Marks).	Oesterr.-Ungar. Bank (in Million Kronen).
1903 .	522.2	23.8	694.2	136.8	300.6
1904 .	527.6	24.6	719.0	153.5	262.2
1905 .	389.8	25.0	590.8	153.5	259.6
1906 .	193.5	23.5	1,046.5	34.4	112.8
1907 .	312.5	24.3	988.4	58.2	6.7
1908 .	378.7	26.8	944.7	57.5	41.1
1909 .	471.3	26.6	771.1	61.3	100.9
1910 .	550.7	27.1	543.8	10.6	23.4
1911 .	486.9	28.0	561.4	113.3	50.4
1912 .	442.4	28.4	1,471.8	54.7	98.2
1913 .	369.0	27.0	1,133.0	18.0	220.0

TABLE E.

Messenger of Finance, No. 5, 1914 (R.), p. 204, "Investment of the Resources of the State Savings Banks."

Turnover of the State Savings Banks, 1903-12 (in Million Roubles).

Year.	Remaining at end of Year.	In course of Year.		Remaining at end of Year.
		Deposited.	Withdrawn.	
1903 . .	659.5	359.6	219.9	799.2
1904 . .	799.2	237.0	160.0	876.2
1905 . .	876.2	235.8	187.4	924.6
1906 . .	924.6	133.0	55.7	1,001.9
1907 . .	1,001.9	134.3	30.0	1,106.2
1908 . .	1,106.2	132.8	64.8	1,174.2
1909 . .	1,174.2	180.0	85.8	1,268.4
1910 . .	1,268.4	165.8	31.5	1,402.2
1911 . .	1,402.2	171.8	53.3	1,520.7
1912 . .	1,520.7	139.8	42.9	1,617.6

The effect of the disturbed years, 1904-6, will be noted.

TABLE F.

Messenger of Finance, No. 3, 1914 (R.), p. 83, "The State Savings Banks in the year 1912."

Increase in the Number of Savings Banks.

Year.	No. of Banks (excluding School Banks).	Growth for Year.
1903	6,417	223
1904	6,558	141
1905	6,609	51
1906	6,679	70
1907	6,710	31
1908	6,792	82
1909	7,051	259
1910	7,365	314
1911	7,705	340
1912	8,005	300

TABLE G.

Messenger of Finance, No. 5, 1914, l.c. (R.).

Increase in the Number of Savings Books and Deposits.

At end of Year.	No. of Savings Books (in 1,000's).	Money Deposits (Million Roubles).
1903	4,854	860.5
1904	5,127	910.6
1905	4,988	881.2
1906	5,665	1,035.0
1907	6,210	1,149.2
1908	6,560	1,207.6
1909	6,940	1,282.9
1910	7,436	1,396.9
1911	7,972	1,503.0
1912	8,455	1,594.9
Increase	94 per cent.	103 per cent.

TABLE H.

Messenger of Finance, No. 9, 1914 (R.) p. 385, "Insurance Operations of the State Savings Banks."

Number of Contracts drawn up 1906-12.

Kind of Insurance.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
1. Life insurance	322	546	660	746	897	1,661	2,015
2. Mixed insurance . .	375	985	1,235	1,358	2,166	3,847	5,285
3. Insurance of minors up to majority	39	93	172	201	258	504	455
4. Insurance of life pensions . .	12	29	35	43	52	45	66
Sums insured (in 1,000 Roubles).							
1. Life insurance . .	673	1,049	1,323	1,430	1,642	2,340	2,679
2. Mixed insurance . .	707	1,845	2,355	2,538	3,584	5,286	6,570
3. Insurance of minors . .	35	125	185	259	301	502	469
4. Insurance of life pensions . .	2.6	7.4	5.7	11.2	12.8	13	13.8

TABLE I.

Messenger of Finance, No. 5, 1914 (R.).

Occupations followed by the holders of Savings Books.

Mode of Occupation.	Percentage of Savings Books to Total.
Landowners	0.5 per cent.
Agricultural and village professions . .	29.5
Town professions	13.4
Factory workers	5.3
Service	8.4
Trade	8.0
Clerical	2.5
Military service :	70 per cent. in hands of town dwellers.
Officers	1.1
Other ranks	4.0
Civil servants	3.5
Social and private service	15.0
Others	8.8

TABLE J.

Messenger of Finance, No. 9, 1914 (R.).

Occupations followed by Persons insured in the Savings Banks.

Type of Occupation.	No. of People.	Amount Insured.		Percentage of Insured Sum to Total.
		Total (in 1,000 Roubles).	Average Amount per head (in Roubles).	
Civil service	3,274	5,362.4	1,638	17.8
Trade and commission business	2,934	5,191.5	1,769	17.1
Private office service	1,686	2,837.5	1,683	9.3
Workers	1,337	1,166.0	872	3.8
Service	1,234	837.7	679	2.8
Members of the clergy	1,217	2,540.6	2,088	8.4
Artisans	1,169	1,194.7	1,022	3.9
Educational work	963	1,938.1	2,013	6.4
Medical work	858	2,218.2	2,585	7.3
Military and naval service	504	1,087.2	2,157	3.6
Technical	381	949.8	2,493	3.1
<i>Agriculture</i>	359	516.3	1,448	1.7
Liberal professions	307	839.1	2,735	2.8
Social service	179	344.8	1,926	1.1
Other occupations and without occupations	2,267	3,323.6	1,466	10.9
Total	18,669	30,347.9		

The very small percentage occupied by agriculture will be noted.

TABLE K.

Messenger of Finance, No. 5, 1914 (R.).

"How the Savings Fund is invested."

On January 1.	State Loans.	Railway Loans.	Land Loans.		Total.
			Mortgage Deeds of the Nobles' Bank, and Cer- tificates of the Peasants' Bank.	Mortgage Deeds of Private Land Banks.	
In Million Roubles.					
1903 . .	63.4	216.9	388.8	38.2	707.3
1911 . .	595.7	388.8	581.5	16.9	1,582.9
1912 . .	667.2	384.9	632.2	16.9	1,701.2
1913 . .	883.1	385.1	713.5	16.9	1,798.6
As percentage of general total.					
1903 . .	8.96	30.67	54.97	5.40	100
1911 . .	37.63	24.56	36.74	1.07	100
1912 . .	39.22	22.63	37.16	0.99	100
1913 . .	37.98	21.41	39.67	0.94	100

TABLE L.

Explanatory Memorandum to the Budget for 1914, Part II, p. 98.

Number and Types of Petty Credit Institutions.

No. of Institutions.	Type of Institution.	Amount of Advances given (in 1,000 Roubles).
6,257	Petty Credit Societies	18,500
950	Loan and Savings Associations	2,600
128	Zemstvo Petty Credit Funds	1,700
57	Peasant Communal P.C. Associations	600
10	Petty Credit Unions	200
7,402		23,600

TABLE M.

Ibid. Growth of the Petty Credit Institutions.

	At January 1.			At July 1, 1913.
	1911.	1912.	1913.	
No. of Institutions.				
Credit Societies	4,558	5,954	7,963	8,947
Loan and Savings Associa- tions	2,143	2,603	3,030	3,314
Peasants' Communal Petty Credit Institutions	5,755	5,423	5,145	5,093
Zemstvo Petty Credit Funds	89	114	149	162
Total	12,545	14,094	16,287	17,516
No. of Members (in 1,000's).				
Credit Societies	2,379·3	3,352·7	4,867·7	5,718·7
Loan and Savings Associa- tions	1,067·7	1,394·4	1,726·3	1,928·3
Peasants' Communal Petty Credit Institutions	2,130·9	2,347·6	2,347·6	2,347·6
Total	5,577·9	7,094·7	8,941·6	9,994·6
Working Capital (in 1,000 Roubles)				
Credit Societies	80,727	134,038	213,890	316,040
Loan and Savings Associa- tions	158,195	209,402	255,560	294,132
Peasants' Communal Petty Credit Institutions	74,847	87,195	87,195	87,195
Zemstvo Petty Credit Funds	14,992	28,034	44,975	57,530
Total	328,761	458,669	601,620	754,897

TABLE N.

Messenger of Finance, No. 24, Year 1914 (R.), p. 514, "The State Savings Banks and the Petty Credit Institutions," by Mr. I. Nazorov.

The increasing significance of Petty Credit Institutions as compared with the Savings Banks, during the period 1903-12.

Year.	Deposits received.	
	In Savings Banks.	In Petty Credit Institutions.
	In Million	Roubles.
1903	76	—
1904	55	—
1905	deficit 77	6
1906	184	10
1907	93	19
1908	32	15
1909	42	33
1910	74	53
1911	73	74
1912	61	73

	Million Roubles.
In the 5-year period 1903-7.	
Collected by the Savings Banks	331
In the 3-year period 1905-7.	
Collected by the Petty Credit Institutions	35
Total	<u>366</u>
In the 5-year period 1908-12.	
Collected by the Savings Banks	282
In the 5-year period 1908-12.	
Collected by the Petty Credit Institutions	248
Total	<u>530</u>
Increase	164

TABLE O.

Ibid. Figures showing the influence of the high rate of interest paid by the Petty Credit Institutions in attracting deposits to these institutions :

Districts.	Amount of Deposits, 1 Jan., 1909 (in 1,000 Roubles).	Rate of Interest Paid.		Percentage of Total Deposits receiving 7 per cent. or more.
		Up to 7 per cent.	Over 7 per cent.	
		Per cent.	Per cent.	Per cent.
East	1,460.1	42	52	94
Central	3,066.2	57	31	88
South	9,282.0	47.8	41	88.8

TABLE P.

Explanatory Memorandum to the Budget for 1914, p. 21.

Operations of the Peasants' Bank, 1906-13.

Land Reserves.	Private Land bought by the Bank.	Transferred to the Bank by the Ap-panages.	Foreclosed Mortgages.	Total.
		Dessiatines.		
Remainder of land acquired prior to 1 January, 1906	263,272	—	51,514	314,786
Newly acquired by the Bank.				
1906	1,144,461	—	51,551	1,196,012
1907	1,519,848	353,713	158,946	2,032,507
1908	572,082	784,122	140,829	1,497,033
1909	172,855	57,627	53,069	283,551
1910	172,189	7,562	23,459	203,210
1911	196,227	17,798	18,810	232,835
1912	146,544	22,961	28,580	198,085
1913	102,646	874	2,835	106,355
Excess of land disclosed on detailed survey . . .	4,493	350	2,467	7,310
Total . .	4,294,617	1,245,007	532,060	6,071,684

TABLE Q.

Explanatory Memorandum to the Budget for 1914, p. 21.
 Sale of Land to the Peasants by the Peasants' Bank.

Years.	Sold with Postponement of part of Purchase Money.				Sold for Cash, returned to former Owners, exchanged, and ceded gratuitously.	
	Individual Householders.		Village Communes and Peasant Societies.			
	Dess.	Per cent.	Dess.	Per cent.	Dess.	Per cent.
1906 . .	1,241	3·1	38,003	95·9	390	1·0
1907 . .	4,559	2·4	175,589	92·0	10,681	5·6
1908 . .	126,043	38·0	198,913	60·0	6,801	2·0
1909 . .	432,487	76·8	118,820	21·1	11,676	2·1
1910 . .	711,207	89·8	53,564	6·8	26,875	3·4
1911 . .	633,754	87·9	48,904	6·4	41,376	5·7
1912 . .	347,413	87·3	24,274	6·1	26,238	6·6
1913 (6 months)	179,295	87·1	13,077	6·4	13,364	6·5
	2,435,999	75·1	666,144	20·6	137,371	4·3

	Total Dessiatines.					
1906	39,634
1907	190,799
1908	331,757
1909	562,983
1910	791,646
1911	721,034
1912	397,925
1913 (6 months)	205,736
	<u>3,241,514</u>					

TABLE R.

Ibid. Loans advanced by the Peasants' Bank to Individual Purchasers.

Years.	No. of Loans.	Area Mortgaged (Dessiatines)	Percentage of Loans to individual Purchasers as compared with the total No. of advance Operations.	Percentage of Area mortgaged by individual Borrowers to the total Area mortgaged.
1906	543	7,014	18·7	1·5
1907	799	12,047	18·6	1·6
1908	1,652	26,256	28·4	3·8
1909	6,996	70,155	62·1	10·4
1910	14,829	153,521	76·1	19·6
1911	20,524	217,468	82·8	30·3
1912	17,057	191,902	82·9	35·2
1913 (6 months) .	7,365	90,891	80·2	36·0
	69,765	769,254	71·0	15·7

TABLE S.

The Trade and Industry of European Russia in Regions, edited by the Ministry of Trade and Industry (R.).

Returns of the Commercial Inquiry of 1901.

Turnover per head of population in roubles.

Regions.	Commerce.	Industry.	Total.
1. North Forest	21	11.5	33
2. North West	88.5	41.2	130
Without Petrograd	42.1	22	64
3. Moscow Industrial	167.3	136.1	303
Without Moscow	54.2	106.8	161
4. Central Agricultural	26.1	11.2	37
5. Urals	35.2	32.8	58
6. South East	70.1	14.6	85
7. Ciscaucasia	42.5	7.9	50
8. South Industrial	95.5	29.2	125
9. South Mining	43.5	72.5	116
10. West	29.5	22.9	52
11. White Russia	16.1	6.2	22
12. Poland	50.3	50.3	101
Average for European Russia	52.5	31.9	84
Without Moscow and Petrograd	38.2	26.4	65
Totals in 1,000 Roubles	6,033,759	3,669,014	9,702,773
As percentages	62.2	37.8	—
Totals without Moscow and Petrograd	4,301,968	2,975,726	7,283,694

TABLE T.

Raffalovich, A., *Russia*, etc., p. 380.
Growth in the Number of Joint Stock Banks and their Branches.

Years.	Banks.	Branches.	Total.
1904	37	278	315
1905	35	295	330
1906	35	327	362
1907	35	339	374
1908	35	363	398
1909	34	409	443
1910	31	492	523
1911	33	643	676
1912	34	691	725
1913	45	752	777
1914	47	743	790

2. Currency.

TABLE A.

Messenger of Finance, No. 25, 1914 (R.).

The issue operations of the State Bank ; their significance as compared with its other liabilities.

On 1 January of each year.

Liabilities.	1910.		1911.		1912.	
	Million Roubles.	Per cent.	Million Roubles.	Per cent.	Million Roubles.	Per cent.
Credit Notes	1,300·0	59·9	1,350·0		1,450·0	
Capital	55·0	2·5		2·3	55·0	2·0
Deposits and Current Accounts			285·3	11·8	276·6	10·2
Other Liabilities	78·7	3·6	70·9	2·9	68·4	2·3
Treasury account	427·2	19·7	651·2	27·0	857·0	31·7
Accounts between branches			0·1			

On 1 January of each Year.

Liabilities.	1913.		1914.	
	Million Roubles.	Per cent.	Million Roubles.	Per cent.
Credit Notes	1,600·0	55·4	1,775·0	56·3
Capital		1·9	55·0	1·7
Deposits and Current Accounts	281·0	9·8	277·0	8·8
Other Liabilities	78·7	2·7	92·6	3·0
Treasury Account	872·9	30·2	951·2	30·2
Accounts between Branches			0·1	

TABLE B.

Messenger of Finance, No. 25, 1914 (R.).
Analysis of Russia's Gold Reserve for the 5-year period, 1910-14.

	1910.	1911.	1912.	1913.	1914.
	In Million Roubles. (1) In Russia.				
Russian gold coin- age, new issue .	569.2	510.4	496.9	524.0	655.5
Russian gold coin- age, old issue .	3.9	4.2	4.4	4.5	1.3
Finnish marks . .	8.6	12.5	9.1	9.7	7.6
Assignments of gold	26.9	20.6	4.1	6.0	30.1
Ingots	446.2	553.6	615.8	654.9	702.6
Foreign coinage . .	118.7	128.6	128.6	128.7	128.7
Bank notes of for- eign banks . .	0.1	1.7	0.4	0.1	2.0
Total . .	1,173.6	1,231.6	1,259.3	1,327.9	1,527.8
	(2) Abroad.				
Bills and cheques in foreign places .	1.0	2.1	3.7	9.1	4.3
Gold in foreign banks	239.9	216.6	173.2	218.4	163.1
Total . .	240.9	218.7	176.9	227.5	167.4
General total of gold	1,414.5	1,450.3	1,436.2	1,555.4	1,695.2

TABLE C.

The Times Financial Supplement, 11 September, 1905.

After stating that a treaty of peace had been signed between Japan and Russia, the writer continues, "The war has taxed Russia's resources to the utmost, but the convertibility of the paper rouble remains unimpaired. Russia emerges from the war having escaped the danger of forced paper currency, which shows the strength of her Treasury, and the ability of her Government to maintain the gold standard in its full integrity. After eighteen months' severe struggle, the position of the Imperial Bank remains satisfactory; the holding of gold in January, 1904, was 902 million roubles; in August, 1905, 1,128 million

roubles ; and large credit balances are also held abroad." After referring to the large borrowings at home and abroad during the war, the writer concludes : " It is generally believed that Russia will have to borrow again to reorganize her army, and reconstitute her navy, in which case she will have no difficulty in finding financial aid for her requirements."

TABLE D.

Raffalovich, A., *Russia*, etc., p. 359.

Elements of the monetary circulation, 1897-1914.

On 1 January.	Bank Notes.	Gold.	Full-price Bank Silver Coin.	Total.
		In Million Roubles.		
1897	1,067·9	36·0	29·9	1,133·8
1898	901·0	147·8	78·9	1,127·7
1899	661·8	451·4	121·5	1,234·7
1900	491·2	641·3	145·3	1,277·8
1901	555·0	682·1	145·7	1,382·8
1902	542·4	694·2	140·3	1,376·9
1903	553·5	731·9	137·5	1,422·9
1904	578·4	774·8	133·2	1,486·4
1905	853·7	638·6	123·0	1,660·3
1906	1,207·5	873·8	133·4	2,178·7
1907	1,194·6	641·9	119·8	1,956·3
1908	1,154·7	622·4	119·6	1,896·7
1909	1,087·1	651·1	110·5	1,758·7
1910	1,173·8	580·9	112·5	1,867·2
1911	1,234·5	641·7	115·9	1,992·1
1912	1,326·5	655·8	117·6	2,099·9
1913	1,494·8	628·7	120·5	2,244·0
1914	1,664·7	494·2	122·7	2,281·6

The same as percentages, 1906-14.

1906	55·4	38·5	6·1	100·0
1907	61·6	32·8	6·1	100·0
1908	60·9	32·8	6·3	100·0
1909	61·8	31·9	6·3	100·0
1910	62·9	31·1	6·0	100·0
1911	62·0	32·2	5·8	100·0
1912	63·2	31·2	5·6	100·0
1913	66·6	28·0	5·4	100·0
1914	72·9	21·7	5·4	100·0

3. National Debt.

TABLE A.

The Russian Money Market, 1908-12, St. Petersburg, 1913
(in Fr. and R.).

Figures illustrating the tendency towards emancipation from foreign control in finance.

Diagram 3.

Payments made in Russia and abroad for the service of the Public Debt.

Years.	In Russia.	Abroad.	Total.
In Million Roubles.			
1908	194.5	202.5	397.0
1909	214.5	180.5	395.0
1910	233.2	175.8	409.0
1911	246.0	147.0	393.0
1912	200.2	187.3 ¹	387.5

¹ Increase in 1912 because rate of exchange unfavourable to Russia.

TABLE B.

Ibid. Diagram 22.

Issue of securities in Russia and abroad, 1908-12.

Years.	In Russia.	Abroad.
In Million Roubles.		
1908	645.2	254.4
1909	449.8	345.5
1910	713.8	205.1
1911	980.3	256.0
1912	898.0	452.0

TABLE C.

Ibid. Diagram 23.

Securities issued or guaranteed by the State on 1 January, 1908-12. Their division between Russia and abroad.

					Total Million Roubles.	Percentage.
1908.						
In Russia.	.	.	.	.	5,862·0	52·7
Abroad	.	.	.	.	5,226·3	47·3
					<u>11,128·3</u>	<u>100·0</u>
1909.						
In Russia.	.	.	.	.	6,125·2	53·7
Abroad	.	.	.	.	5,285·2	46·3
					<u>11,410·4</u>	<u>100·0</u>
1910						
In Russia.	.	.	.	.	6,273·0	53·4
Abroad	.	.	.	.	5,470·2	46·6
					<u>11,743·2</u>	<u>100·0</u>
1911.						
In Russia.	.	.	.	.	6,516·7	54·0
Abroad	.	.	.	.	5,551·9	46·0
					<u>12,068·6</u>	<u>100·0</u>
1912.						
In Russia.					6,864·9	56·0
Abroad	.				5,403·1	44·0
					12,268·0	100·0

TABLE D.

List of Russian Government Loans quoted on the London Stock Exchange and on other foreign bourses.

Compiled from *The Russian Bondholders' Manual*. Russian Ministry of Finance, London, 1909, 1911, 1913.

1913 Issue.

Year of Issue.	Title of Loan.	Original Amount.	Amount outstanding.	Where Quoted.
1822	5% Loan .	£6,001,030	£3,883,298	Paris, Amsterdam, Berlin, London.
1906	5% Loan .	Fr. 2,250 mill.	2,250 m.	Paris, Amsterdam, London, Vienna, Brussels.
1909	4½% Loan	„ 1,400 „	1,400 „	Paris, London, Amsterdam.
1867	4% Nicolas Railway Bonds, 1st Issue	„ 300 „	244.0 „	Paris, Amsterdam, Berlin, London, Brussels.
1869	<i>Ibid.</i> : 2nd Issue	„ 277.7 „	226.6 „	Paris, Amsterdam, Berlin, London, Brussels.
1889	4% Russian Consolidated Railway Bonds, 1st Series	„ 700 „	656.1 „	Paris, Amsterdam, Berlin, London, Brussels.
1889	<i>Ibid.</i> , 2nd Series	„ 1,241 „	1,164.1 „	Paris, Amsterdam, Berlin, London, Brussels.
1891	<i>Ibid.</i> , 3rd Series	„ 320 „	299.9 „	Paris, Amsterdam, Berlin, London, Brussels.
1888	4% Bonds of the Grt. Russian Rwy. Coy. (Nicolas Railway)	11.8 mill. Rs. gold	10.0 mill. Rs. gold	Amsterdam, London.
1894	4% Dvinsk-Vitebsk Bonds	£3,026,240	£2,642,400	Paris, London.
1894-1913, Various issues	4% Russian Rente	Total issue to 1-14 Jan., 1913 Rs. 2,820,000,000		Paris, Amsterdam, Berlin, Brussels, London, New York.
1894	3½% Gold Loan	Fr. 400 mill.	378.5 mill.	Paris, Amsterdam, Berlin, Brussels, London.
1859	3% Loan .	£7,000,000	£1,754,400	Amsterdam, Berlin, London.
1882-1889	3% Bonds of the Trans-Caucasian Railway	Fr. 222.6 mill.	175.8 mill.	Paris, Amsterdam, Berlin, Brussels, London.

TABLE E.

List of Russian guaranteed Railway and Municipal Bonds, issued on the London Market, 1909-13. Compiled from *The Anglo-Russian Trust, Particulars of Issues*, Lond. 1913.

Railway Bonds guaranteed by the Russian Government.

Year	Title.	Amount
1909.	Armavir-Touapse Rwy. $4\frac{1}{2}$ per cent. Bonds	£2,222,220
1910.	Troitzk Rwy. $4\frac{1}{2}$ per cent. Bonds . . .	3,695,960
1911.	Black Sea-Kuban Rwy. $4\frac{1}{2}$ per cent. Bonds .	1,913,760
1912.	Kahetian Rwy. $4\frac{1}{2}$ per cent. Bonds. . .	1,400,000
1910.	Wolmar Rwy. $4\frac{1}{2}$ per cent. Bonds guaranteed by the Government of Livonia (Baltic Provinces)	179,880
1910.	Kokand-Namangan Rwy. $4\frac{1}{2}$ per cent. Bonds	402,100
		<hr/>
		£9,813,920

Russian Municipal Bonds.

1911.	City of Baku 5 per cent. Gold Bonds (issued in London and Brussels)	2,857,140
1913.	City of Vilna 5 per cent. Gold Bonds .	449,160
		<hr/>
		3,306,300
Total		<hr/>
		£13,120,220

4. The State Budget.

TABLE A.

Messenger of Finance, No. 2, 1914 (R.), p. 46.

List of laws passed concerning the Zemstvos, 1895-1912, illustrating the tendency to increasing State control.

1 *June*, 1895.

The Zemstvos were liberated from the obligation of supplying funds for the maintenance of J.P.'s and the Peasants' Control Institutions. The sums previously appropriated to these purposes were to form a special fund for the maintenance of the roads.

1899.

Loans were to be granted to the Zemstvos at a rate of interest of 3.8 per cent. for the improvement of the roads.

12 *June*, 1900.

The annual increase in rates was limited nominally to 3 per cent. In reality, however, this law made very little difference, as exceptions were allowed. For instance, out of 1,001 estimates with an increase greater than 3 per cent., 619 (i.e. 62 per cent.) were allowed to pass by the Governors of the province as not burdensome to the people: of the 382 submitted to the Ministry of Finance, 147 were fully confirmed, and 235, with a general assessment of taxes amounting to 77 million roubles, passed with a total decrease of 4.1 million roubles. This examination by the Ministry of Finance was a substitute for the auditing of local accounts by the Central Authority which takes place in England. It was designed to control any tendency to extravagance on the part of the local authorities.

3 *May*, 1908.

Assistance from the Treasury to such local bodies as found difficulty in adequately maintaining or developing public education. (6.9 million roubles.)

9 *May*, 1911.

A yearly credit of 7 million roubles was added to the above.

15 *May*, 1911.

Funds to the amount of 4 million roubles were to be assigned for preventive measures against cholera and the plague.

5 *December*, 1912.

Law for the support of local finances.

26 *June*, 1912.

Establishment of a special State Board to extend credits to the Zemstvos and the towns.

TABLE B.

Ibid. Sources of revenue at the disposal of the Zemstvos in

<i>Taxes on immovable property</i> . . .	184,505·9	Roubles.
Arrears	9,681·1	
Taxes on trade and industry . . .	5,442·2	
Various duties	5,612·9	
Incomes from capital and property belonging to the Zemstvos . . .	17,748·4	
<i>Grants in aid</i> and return of expenditure	59,538·8	(including 47,152·9 Rs. from the Treasury).

TABLE C.

Ibid. Increase in local rates, 1865-1913.

Year.	Total in Million Roubles.	Average annual in- crease over preceding period expressed as Percentages.
1865	5·7	—
1868	15·0	53·4
1871	20·0	11·1
1875	27·8	11·2
1880	35·1	5·2
1885	43·2	4·7
1890	47·0	1·7
1895	65·8	7·9
1900	88·3	6·8
1903	99·5	4·2
1906	124·2	8·3
1910	167·9	8·8
1911	188·2	12·1
1912	220·2	17·0
1913	253·8	15·1

TABLE D.

The Russian Almanac, London, 1919, p. 155, N. Peacock.

Increase of municipal revenue, 1871-1913.

Year.	Municipal Revenue (in Million Roubles).	Annual Increase in Percentages.
1871	21	—
1881	39	8.6
1889	54	4.8
1894	67	4.8
1899	91	7.1
1904	131	8.8
1909	181	7.6
1910	200	10.5
1913	276	12.7

TABLE E.

Messenger of Finance, No. 2, 1914 (R.), p. 63, "Bond Loans of Russian Towns in 1913."

List of municipal bond loans sanctioned in 1913.

Name of Town.	Date of Sanction.	Amount of Loan (in 1,000 Roubles).
Saratov	15 January	2,300
Rybinsk	26 "	600
Samara	26 "	1,985
St. Petersburg	25 February	66,500
Barnaul	7 March	1,400
Vilna	15 "	800
Eisk	7 April	900
Kishinev	12 "	4,500
Kiev	24 June	6,196
Voronezh	24 "	1,825
Ivanovo-Voznesensk	25 July	1,100
Irkutsk	25 "	2,350
Riga	23 August	12,500
Kharkov	20 September	12,414
Perm	20 "	3,500

Part IV.

WAYS OF COMMUNICATION.

CHAPTER VIII.

ROADS AND WATERWAYS : SHIPPING.

IN no country has the problem of providing and maintaining suitable road communications been found particularly easy of solution. The history of the development in our own country shows that centuries of chaotic legislation and inefficient service preceded the evolution of a satisfactory system.¹ In Russia the problem presented very special difficulties. The enormous extent of the country, and its sparse population over large areas, rendered the task much more formidable than it would have been in a smaller and more thickly populated country. In many parts of the country there was no stone, and very little gravel, consequently material for road-building and repairing was difficult to obtain, and expensive when available. In one way the climate facilitated communication. In winter, after the snow had fallen to a thickness of perhaps several feet, and had become frozen over, a natural road was formed, over which sleighs could pass with the utmost rapidity and smoothness. This was the so-called "winter road." But in autumn, before the frosts had finally set in, and in spring when the thaws began, these same roads were converted into morasses of mud, quite often impassable, even for wheeled traffic.

The fact that Russia was divided into two main areas as regards food-stuffs, the producing area of the south, and the consuming area of the north, lent peculiar significance to the question of communication. Adequate roads were necessary, not only for the development of the social and

¹ Webb, Sidney and Beatrice, *English Local Government. The Story of the King's Highway*. London, 1913.

industrial life of the country, but for the very existence of the people. Railways were late in being developed, therefore for long the northern and southern regions could only exchange their timber and wheat by means of roads and waterways.

Under the old system of road construction and maintenance, roads in Russia were divided into five classes, namely, (1) main roads, (2) high roads, (3) ordinary post roads from government to government, (4) trade and district communications, and (5) rural or field roads and bridle paths.¹ As in most countries, the State took upon itself the responsibility of building and maintaining roads of the first class, i.e. the main highways joining together the principal parts of the country. Those of the second, third, and fourth classes were under the control of local committees composed of Government officials. The rural roads were maintained by the communities and landowners whose lands they traversed. In all classes of roads, the system of maintenance was based mainly on the forced labour of the population, supplemented by grants in money from the State Treasury.

The formation of the Zemstvos in 1864 marked the beginning of the transition from a system of road construction and maintenance based on the forced labour of the now emancipated serfs, to one based on compulsorily levied rates in money. In England this transition was enforced by law.² In Russia, the Zemstvo was merely given the right to raise money rates if it saw fit: the system of levying contributions in kind might remain, and as a matter of fact did persist in the Baltic regions right up to the outbreak of the war. The new system proved to be much more expensive than the old, and, particularly during the Ministry of Count Witte, increasing Grants in Aid had to be given by the State Treasury for the improvement of the roads. The peculiar circumstances of the Russian village

¹ *The Russian Year Book*, 1915, p. 239.

² Money rates were first introduced by the Act of 1691, by which a rate of sixpence in the £1 was to be levied on all parishioners (Webb, *op. cit.*, p. 22); later by the General Highways Act of 1835 (Webb, *op. cit.*, Chap. IX).

must be borne in mind when comparing the two systems. The poverty of the peasant, and his abundance of spare time at certain seasons of the year, render contributions in labour much less burdensome than a money rate, provided they are arranged at a convenient time, and do not necessitate him going too far away from his village.

In general it may be said that the maintenance of roads and bridges remained unsatisfactory under the new system, as it had been under the old. The immense distances to be traversed rendered it difficult for the central authority to exercise any detailed supervision. The local authorities were in many cases hampered by lack of funds, and were not always as efficient or as energetic as might have been desired.¹ Consequently the road system in Russia left much to be desired, both as regards the number of roads in existence and their state of maintenance.²

WATERWAYS.

RIVERS.

There is no European country more generously endowed with navigable waterways than is Russia. From the earliest period of her history these "water-roads" have been a potent factor in stimulating the political and economic unification of the country.³ When overland routes were too encumbered by stretches of impenetrable forest to be of any utility, or when they were infested with dangerous enemies, the water routes offered safe and easy passage to merchant traders and warrior princes alike. The rivers

¹ *Proceedings of the Duma* (R.), 23 January, 1912. Mr. Godnyev complains of the imperfect organization of the State Department dealing with roads. He mentions cases of extravagance in the ordering of materials, for which contractors were paid much higher prices than were necessary. He also mentions the case of the construction of five bridges in the Warsaw region, which were later found to be of imperfect construction, although the contractors had been paid for their work, and had declared that the bridges had been built according to specification.

² Appendix A. Statistics as to the extent of roads in 1912.

³ Count Moltke commented on the importance of the river system in this respect as early as 1876, in his *Briefe aus Russland*: "It has been said that the increase of population would break up the Empire. But no part of it can exist without any of the other parts, the forest region of the north not without the granary of the south, the industrial centre not without both, the interior not without the coast, and not without the common water-road of the Volga."

were the primary connecting link between the widely diversified, but mutually interdependent zones into which the country is divided.

In European Russia the immense extent of the Volga renders communication possible between the frozen seas of the North—the Gulf of Finland and the Gulf of Bothnia, the White Sea and the Baltic—with the torrid shores of the Caspian.¹ An almost continuous water route from the Black to the Baltic Sea is found by navigation up the river Don, and thence northwards on the Dvina. Besides the Don, the Black Sea receives the very considerable rivers of the Dnieper, the Bug, and the Dniester; the Baltic receives the Dvina; the Vistula and the Nieman empty themselves into non-Russian seas.

Asiatic Russia is equally fortunate in the number of long and navigable rivers which she possesses.² The mighty rivers of the Ob, the Enessei, and the Lena, the first of which is the fifth longest river in the world, follow parallel courses, roughly in a north-westerly direction, across the whole vast extent of Siberia. Before the completion of the Trans-Siberian railway, they were the only means by which communications could be effected within Russia's Asiatic possessions, and they will always be of importance as feeders for the railway, particularly when further means for their improvement have been undertaken.

In spite of the great natural advantages bestowed upon Russia by the possession of these numerous and lengthy rivers, it cannot be said that she has developed a satisfactory system of water communications. The facts of climate and configuration render the rivers, in their natural state, defective as routes for traffic, and sufficient means have not been forthcoming to develop and maintain them in a satisfactory condition. It has to be noted that Russian rivers have their source, not in mountains, but in lakes and swamps; they therefore tend to be sluggish in their course.

A primary difficulty is the irregularity of the water-level in

¹ Appendix B. Statistics as to the navigable length of the rivers of European Russia.

² Appendix C. Statistics as to the navigable lengths of the rivers of Asiatic Russia.

the rivers. In spring, the melting of the immense quantities of snow which have covered the plains during the winter, adds enormously to the volume of water in the rivers and often causes serious floods, which may frequently damage the river banks, inundate the surrounding country, and prove a serious hindrance to traffic. In the heat of summer, on the other hand, the water-level may become so low that navigation is again rendered difficult. Not nearly enough has been done to combat these difficulties by strengthening the river banks and regulating the water level.

Further, the severity of the winters renders navigation impossible for some months at least every year. The period during which navigation is open varies according to latitude. In North Russia it is from May to October, in Central Russia from April to November, in South Russia from March to November.

From the point of view of international trade the southern rivers suffer from the fact that they fall into the enclosed Black and Caspian Seas, while those of the north, both of Asiatic and of European Russia, fall into seas which are closed by ice for several months of the year.

It was only after 1905 that energetic steps were taken for the establishment and maintenance of a sufficient number of river ports, but comparatively little progress was made in the matter before the outbreak of the war.

CANALS.

The rivers of Russia lend themselves particularly well to canal connections, since the head waters of the main rivers are comparatively close to each other and can be easily linked up. A system of artificial waterways, consisting of canals and sections of rivers made into canals, has been formed, by which the Caspian Sea is joined to the Baltic and White Seas, and the Black Sea to the Baltic.

In Siberia, the Ob and the Yenessei are joined by a canal 95 miles in length. In European Russia two groups of fluvial basins may be distinguished. (1) In the north-east are the basins of the Volga, the Neva, and the Northern

Dvina. The first two are connected by three canals, namely, the Vishnivoltsk, 85 miles in length; the Tikhvinsk, 117 miles; the Marie, 423 miles. The Volga and the Northern Dvina are connected by the Duke Alexander of Wurtemberg canal 34 miles in length. (2) In the west are the basins of the Dnieper, the Nieman, and the Vistula, which are served by three systems. The Dnieper communicates with the Baltic by the Berezina canal, 66 miles long, which joins it to the Western Dvina, the Oghinsk, which joins it to the Nieman, 67 miles in length, and the Dnieper-Bug, 127 miles, which links it with the Vistula. The Augustin canal, 61 miles long, connects the Vistula and the Nieman.

An enormous amount of territory can therefore be traversed in Russia by means of navigable waterways. It is possible to travel from Astrakhan, on the shores of the Caspian Sea, to Petrograd, 2,400 miles distant, through the Marie canal, or to Archangel, 2,800 miles distant, through the Duke Alexander of Wurtemberg canal. In Siberia, a distance of 3,650 miles can be traversed on the Ob-Yenessei-Angara waterway, from Irbit, on the Nitsa, close to the frontier of European Russia, to Kiatkha on the Selengua, on the Chinese frontier.¹

A canal of considerable economic significance, which was under consideration in 1914, was one joining the Baltic and Black Seas at Riga and Kherson, at an estimated cost of £16 million. It was to be constructed in three sections: (1) the regulation of the Dvina from Riga to Vitebsk, a distance of 556 versts; (2) the canal proper from Vitebsk to Orsha, 78 versts; and (3) the regulation of the Dnieper from Orsha to Kherson, 1,583 versts. Thus commercial communications with the Balkan markets and with the Ukraine would be facilitated, and the alternative route for grain export would relieve the pressure on the State railways at harvest time.²

¹ *The Russian Almanac*, compiled and edited by N. Peacock, London, 1919, p. 124.

² The principal towns which would benefit from the construction of the canal would be Riga, Ekaterinoslav, Dvinsk, Polotsk, Vitebsk, Moghilev, Kiev, Aleksandrov, and Kherson. The chief commodities which would be carried on it for export would be grain, timber, flax, petroleum,

SHIPPING.

Before the war, Russia had not succeeded in building up a mercantile marine which corresponded to the needs of the inland trade on her extensive waterways, and her overseas traffic. In international trade, a very considerable proportion of Russian freight was still carried in foreign vessels, thus involving a serious loss to the country. To mention only two instances, the timber-exporting business in the north would have been greatly benefited by the existence of a Russian mercantile fleet at Archangel, and the project of exporting coal from the Don basin to Mediterranean countries, particularly Italy, was rendered impossible by the insufficiency of the Russian mercantile fleet on the Black Sea.

In spite of generous Government assistance in the shape of subsidies and premiums,¹ the ship-building industry made very little progress in Russia. Although the iron and steel trades were developing rapidly during the twentieth century, they were not situated in the part of the country most suited for shipbuilding, i.e. on the Baltic sea-board and at Petrograd. Transport from the southern iron area, or from the Urals, was very expensive, and the technique of shipbuilding was not so highly developed in Russia as it was in other countries. Hence it was found cheaper and more satisfactory to rely on foreign supplies. As regards steamships, it was estimated in 1914 that 75·7 per cent. of the general number of steamers, and 85·4 per cent. of the general tonnage was built abroad.² England stood first, both as regards the number of vessels and the tonnage supplied.³

sugar, tobacco, fruit, vegetables, while imports of manufactured goods, machinery, artificial manures, could be distributed by its agency.

Vide Appendix D for figures illustrating the comparative importance of rail and water transport for the transport of cereals.

¹ Appendix A. Government grants for the assistance of Shipping: Companies continuing to receive subsidies in 1914.

² *Messenger of Finance*, No. 30, 1914 (R.), p. 123, "The Russian Mercantile Fleet in 1913."

³ Countries supplying Russia with ships in 1914:

	No. of Ships.	Tonnage.		No. of Ships.	Tonnage.
England . . .	388	517,804	Denmark . . .	20	28,050
Germany . . .	114	76,674	Austria-Hungary	68	25,167
Sweden . . .	135	54,242	Belgium . . .	13	12,625

180 THE ECONOMIC DEVELOPMENT OF RUSSIA

The Caspian Sea possessed the largest number of Russian-built vessels, since its geographical position made it difficult for foreign ships to be sent to it, and the ship-building companies in that region enjoyed tariff protection against foreign competition.

The same reliance on foreign markets was apparent in the supplies of machinery for the steamship fleet, only 22·3 per cent. of the vessels having Russian-made machines.

The sailing fleet, on the contrary, was almost exclusively built in Russia, the rich forest areas of the country supplying abundant material for construction. Practically all the vessels were timber-built, only 12 out of a total of 2,597 being made of iron and steel.¹

On 1 January, 1914, the Russian mercantile marine consisted of 3,700 vessels, with a total of 783,000 net registered tons. These were divided into the following classes :

Type of Vessel.	No. of Vessels.	Percentage to General Number.	Net Registered Tonnage.	Percentage to General Tonnage.
Steamships . . .	1,044	28·2	513,003	65·5
Motor boats . . .	59	1·6	13,290	1·7
Sailing vessels . . .	2,597	70·9	256,726	32·8

The intensity of traffic was greatest on the Black and Azov Seas, the Baltic following closely after.² Although on all seas sailing vessels predominated over steamships in number, they were considerably less significant as regards registered tonnage.³

The ownership of the steamship fleet on all seas, stated in tabular form, was as follows :

¹ Total number of sailing vessels = 2,597. Of these, 2,521, or 97 per cent., were built in Russian yards, including 11 in Finland, and only 76 came from abroad.

² Appendix B. Statistics on the distribution of the fleet between the different seas.

³ Appendix C. Statistics on sailing vessels on the various seas as percentage of the total number and of the total tonnage.

ROADS AND WATERWAYS : SHIPPING 181

	No. of Vessels.	Percentage of Number.	Percentage of Tonnage.
Joint-stock companies . . .	429	41·1	65·4
Individual owners	331	31·7	16·2
Commercial houses and joint owners (" sovladeltsy ") . .	249	23·9	17·6
Institutions and other owners .	35	3·3	0·8
	1,044	100·0	100·0

CHAPTER IX.

THE RAILWAY SYSTEM.

WHEN considering the nature of the task to be undertaken in providing Russia with a railway net, the geographical importance of the River Volga as a collecting agency for the products of practically the whole of European Russia must first of all be taken into account.¹ It encloses the greater part of Russia in Europe within a large bow, stretching roughly from the Baltic to the Caspian Sea. It was within this bow that railways were first constructed, to serve as a distributing agency for the commodities collected by the great river. The following aims were kept in view: to connect the Volga region with the Baltic Sea, and Central Russia with the Black Sea and the Western land frontier. Hence the agricultural products of the country might find a speedy route to the markets of Western Europe, from which also the necessary supplies of manufactured goods could be easily distributed in exchange. The right bank of the river was connected with railways at fifteen points, from which lines were laid down leading to Petrograd, Riga, Libau. Thus the twofold object was attained of securing the exchange of goods between the large interior waterways and the principal ports, and connecting the rich district of Central Russia with Western Europe through the Black Sea ports and the Western land frontier.

It remained to connect the extremities of the Empire with the seat of Government, this being comprised in the three following tasks: reaching the White Sea; establishing adequate communication with Siberia; and with the Central

¹ Vide 1882-1911. *Dreissig Jahre russischer Eisenbahnpolitik und deren wirtschaftliche Rückwirkung*, Dr. Mertens, Berlin, 1919, p. 41 et seq.

Asiatic possessions. The importance of the first was seen during the recent war, when Russia was cut off from other routes of communication with her Allies. There was only one line connecting Archangel with the interior, and it was narrow gauge. The Russo-Japanese War of 1904-6 emphasized the embarrassments of inadequate communications between European Russia and the Pacific. The Volga was only bridged at one point, over which all traffic had to pass; later, three were built, at Yaroslav, Sviyashk, and Simbirsk, and a fourth was contemplated. Thus more adequate measures could be taken to tap the enormous agricultural and mineral wealth of Siberia, and direct its flow towards the markets of the West. With regard to the Central-Asiatic possessions, these were only connected with European Russia by the Orenburg-Tashkent line. Russia's activities in this direction were mainly of strategic interest, and their proximity to the Afghan frontier caused them to be looked upon with some apprehension by Britain.¹

The development of the Russian railway net prior to 1905 was an uneven process, due to the hesitation as to whether the system of State or private management of the lines was preferable.² Private enterprise was responsible for the construction of the first railway, the short line to Tsarskoye-Selo in 1837. The Moscow-Petrograd line was constructed by the Treasury in 1842. Progress was slow, only 979 versts being completed by 1855. The Crimean War showed the need for the further extension of the railway net, great difficulties being experienced owing to the lack of adequate communications between the centre of Russia and the seat of war. Since the Government felt that it was too much occupied with the rapid development of the Empire to undertake the whole business of railway construction it now endeavoured to enlist the support of private capital, on the "concession" system. Private companies were granted the privilege of railway construction

¹ Drage, G., *Russian Affairs*, p. 203 *et seq.* The industrial importance of this line as opening up supplies of raw cotton from Turkestan is noted in Section 5, "Industry," p. 252.

² *Messenger of Finance*, No. 16, Year 1914 (R.), "Our Railway Net and its Historical Development."

with a Government guarantee of the capital sunk in them. This system, however, was found to be unsatisfactory, owing to the bad management and careless finance of the companies holding concessions. Some of them made no attempt to reduce their expenses so as to ensure a profit on working, but even made them as high as possible in order to increase the amount paid by the Government. The unpaid obligations to the Treasury of the forty-four private railway companies existing in 1871 amounted to 174 million roubles, a sum which advanced in a few years to 580 million roubles.¹ The findings of a Committee of Enquiry into Railway Affairs, sitting in 1876 and presided over by Count Baranov, were a strong indictment of the abuses of private management and the financial losses inflicted by them upon the Treasury. From the '80's of the nineteenth century, therefore, a combined system of State and private management of the railways came into being, but with the gradual extension of Governmental supervision and control over every department of railway activity. The forty-four railway companies in being in 1871 were reduced to six by the end of the century, the policy being followed of only encouraging such companies as had demonstrated their ability to run the lines at a profit. The State exercised considerable control in the management of the companies remaining in existence, afforded them financial assistance and received in return a share in their net profits. The lines of other companies were expropriated by the State on the expiry of the term of years stated in their concessions. The gradual transition to State control can be seen from the fact that, whereas in 1889 only 23½ per cent. of the railway net was in the hands of the Government, in 1900 that figure had risen to 60½ per cent.²

In the general scheme of railway building the Government concentrated its attention on the weightier task of bringing the extremities of the Empire, in the extreme north and in the Far East, within the railway net, and of developing lines of strategic importance, particularly in Asia and the Caucasus. Lines of lesser political significance were

¹ *Messenger of Finance*, No. 16 (R.), 1.c.

² Drage, *op. cit.*, p. 286.

left to be constructed by private companies whose management could be relied upon not to involve the Treasury in financial losses.

In the opinion of Dr. Ischchanian,¹ who quotes as his authority no less a person than Count Witte himself, strategic considerations not only influenced the construction of purely military and political lines, but reacted upon the development of the whole railway system. They decided the direction of all the tracks which ran from Moscow and Rostov-on-the-Don westwards, and those which ran eastwards from the Urals. Economic and commercial factors, he holds, were either completely ignored, or taken into account only as matters of secondary importance. Dr. Mértens' book on the Russian railway system,² on the other hand, leaves one with the impression that the economic factor was by no means inoperative, although the strategic and political elements were of great importance.³

The construction of the Trans-Siberian Railway, which linked up the administrative centre of Russia in Europe with the most distant possessions of the Empire in the Far East, will always rank as one of the most daring railway projects of modern times, and as one of the greatest achievements of the Imperialist régime. In undertaking it, the Russian Government was actuated by both political and economic motives. In the political sphere the construction of the Trans-Siberian railway was part of the anti-Western tendency which dominated Russian politics in the latter half of the nineteenth century.⁴ This turning away from Europe was accompanied by a movement of expansion towards the East. The conquest of the Caucasus was followed by the annexation of most of the Khanates of Central Asia between 1864-79, thus bringing Russia to the gates of Persia, Afghanistan, India, and arousing the fears of "aggressive Imperialism" which produced so much

¹ Ischchanian, Dr. B., *Die ausländischen Elemente*, etc., op. cit., p. 219.

² Mertens, Dr. O., *Dreissig Jahre . . .*, etc., op. cit.

³ *Vide* Appendix A for statistics as to railway construction before 1904.

⁴ *Cambridge Modern History*, Cambridge, 1910, Vol. XII, Chap. XII, pp. 344-5.

tension in Russian and British diplomatic relationships. The Great Siberian railway was to be the final stride by which Russia would reach the Pacific, secure a firm stronghold there, and find a basis from which she could proceed to consolidate a mighty colonial empire in the East. A strong tinge of Russian "Messianism" coloured these dreams of Empire. Russia, as an Asiatic Power, had a special cultural mission in the backward East, upon which she was to confer the blessings of modern civilization—by force if need be. The Orthodox Church was to have its share in the task, by spreading the light of Christianity in the same unenlightened regions. In actual fact, the first result of the building of the Trans-Siberian railway was to bring Russia into conflict with Japan; and she hardly had time to recover from the disasters in which that conflict resulted, before she was overwhelmed by the cataclysm of 1914.

In the economic sphere many advantages were expected from the opening up of Siberia which the railway would render possible. Siberia had long been regarded chiefly as a place of exile. But it was realized that the Empire could no longer afford to ignore its almost limitless economic possibilities. The Pacific coast represented Russia's sole warm-water outlet, a fact of great importance when the limitations of her European coastline are considered. In this respect the railway fully justified the expectations based on it. Peasant emigration was immensely stimulated, thus affording relief to the pressure on the land in European Russia, and providing the necessary labour forces for the development of Siberia.¹ Government orders for railroad requisites stimulated the iron industry of Siberia; coal-fields were opened up; grain was transported from the Western provinces, and the export of dairy produce, especially of Siberian butter, began to assume dimensions of international significance.²

The length of the Trans-Siberian railway was 5,646 versts, or 3,800 miles; the distance from Moscow to Vladivostok

¹ *Side-lights on Siberia*, J. Y. Simpson, Edinburgh, 1908, Chap. II, "The Great Siberian Iron Road."

² *Siberia: a Record of Travel, Climbing, and Exploration*, S. Turner, London, 1905, Chap. II, "The Siberian Railway and the Dairy Industry."

5,542 miles. The line was completed in three sections, the Siberian, 3,137 versts in length, the Trans-Baikal, 1,679 versts, and the Ussuri railway, 830 versts long.¹ The technical difficulties of construction were enormous. Labour was very scarce; the rigours of the climate rendered work impossible at certain seasons; at some parts the ground, which was perpetually frozen a few feet below the surface, had to be blasted out all the way, as if it were solid rock; the difficulties of contour were considerable, especially near Lake Baikal, where thirty-three tunnels had to be constructed, and even when completed the track was in constant danger from sudden thaws and floods. The vastness of the undertaking, and its distance from the centre of administration, rendered efficient control a matter of great difficulty. Hence serious losses were incurred from improper performance of work, speculation, and official corruption. The total expenditure proved to be considerably in advance of the estimates, and amounted finally to approximately £40 million. Its route, as finally determined, lies, in Siberia, through the town of Omsk, south of Tomsk to Irkutsk at the southern end of Lake Baikal. It then passes along the north of Manchuria, and turns south to Vladivostok. At Omsk it divides, and passes through European Russia in two lines, one northwards, through Tiumen, Ekaterinburg, and Perm, to Petrograd; the other through Cheliabinsk and Samara, to Moscow.²

Railway development from 1905 to 1914 now falls to be considered. A period of intense activity in railway construction at the end of the nineteenth century was followed by a period of comparative quiescence during the first decade of the twentieth. Dr. Mertens³ gives the following figures

¹ The Ussuri Railway was handed over to the Eastern Chinese Railway Company in 1906.

² There is a considerable literature in English on the Siberian Railway. Besides the books already mentioned in the footnotes to this section, the following may be found useful: *Siberia*, Price, M. P., London, 1912, p. 250 et seq.; *Through Russian Central Asia*, Graham, Stephen, London, 1916; *Guide to the Great Siberian Railway*, Ministry of Ways of Communication, ed. by A. I. Dimitriev Mamonov and A. F. Zdiarsky, English translation by Miss L. Kukol-Yasnopoloky, revised by J. Marshall, Petrograd, 1900.

³ Mertens, op. cit., p. 94 and p. 99.

188 THE ECONOMIC DEVELOPMENT OF RUSSIA

showing the growth of railway construction as a percentage from 1882 to 1911 :

		Per cent.
1882-6	4,039 versts	or 18·7
1887-91	3,227	„ „ 12·6
1892-6	8,370	„ „ 29·1
1897-1901	14,758	„ „ 39·7
1902-6	6,348	„ „ 12·2
1907-11	3,399	„ „ 5·8

The break in construction is to be explained by the financial and economic difficulties in which the country was involved as a result of the Japanese War, and the subsequent revolutionary movement (1904-6). Public confidence was shaken, and the Government found it necessary to revert, at least partly, to the policy in force previous to 1881, and extend new concessions to railway companies in order to attract private capital into railway construction. By the law of 10 June, 1905,¹ the following very considerable privileges were granted to private railway companies: The Government guarantee was extended to debenture capital; interest at 3 per cent. was guaranteed on the share capital during the construction and for the first few years of exploitation of the line; newly formed companies were freed from the expense of maintaining Government inspection during construction; if the Government imposed "privilege," i.e. special reduced tariffs without the consent of the railway, the latter had the right to receive the difference between that tariff and its own normal rate; the participation of the State in the net profits of newly-formed companies was also limited—50 per cent. of these profits went to the Government after they had reached 8 per cent. on the share capital, 75 per cent. after they had reached 10 per cent.; the period before expropriation could be carried out by the Government was lengthened from 15 to 25 years. The stimulus thus given to private enterprise may be judged from the fact that from 1908 to 1914, 377 petitions for the right of constructing railway lines were presented. Of these examined, 1,316 versts were actually built, on which share capital amounting to 14·5 million roubles, and debenture capital

¹ *Messenger of Finance*, No. 16, Year 1914 (R.), l.c.

amounting to 127.6 million roubles, was realized. A further 8,205 versts were under construction, with a share capital of 73.2 million roubles, and debenture capital of 546.3 million roubles. In the same period, 1908-14, 1,235 versts were also built by companies already in existence.¹

The increasing activity in industrial and commercial life which characterized Russia during the first decade of the present century, was naturally reflected in greatly increased traffic on the railways. Between the beginning of the century and the year 1911, the average annual figures as to the number of passengers and amount of freight carried were practically doubled.²

Traffic was naturally particularly heavy in years of good harvests, when larger quantities of grain were available for export, and the country's capacity for buying in foreign markets was correspondingly increased.³ But although the traffic in food-stuffs was directly affected by the state of the harvests,⁴ the rapid development of industry brought about a steady increase in the amount of industrial freight carried, coal, manufactured goods, etc., which was not seriously checked even by the results of a poor agricultural year.⁵

¹ Appendix B. Statistics on the increase of the railway net from 1905-13: also on transition from private to State ownership.

² Mertens, *op. cit.*, Chap. XIX, gives the following figures:

Years.	Passengers in Millions.		Goods in Million Poods.	
	Total.	Yearly Average.	Total.	Yearly Average.
1897-1901	471.3	94.3	41,457.6	8,291.2
1902-1906	624.3	124.9	53,761.2	10,752.2
1907-1911	897.3	179.5	69,284.2	15,856.8

³ *Proceedings of the Duma (R.)*, 5 March, 1911, p. 3,644. Mr. Herzenwitz points out the connection between the harvest and the income of the railways, not only for the particular year under consideration, but for the first half of the next as well.

⁴ Appendix C. Statistics as to food-stuffs transported on the railways in 1905 and 1913 with the increase expressed in million poods and as a percentage.

⁵ Appendix D. Statistics as to industrial freight transported on the railways in 1905 and 1913 with the increase expressed in million poods and as a percentage.

Before 1889 Russian railway tariffs were established under a system of free competition between the private railway companies. Their powers of fixing rates were very little limited when concessions were granted. This system, however, was soon found to have grave disadvantages. Competition for traffic between the various lines led to excessive lowering of rates which involved a loss to the Government in view of its guarantee of railway stock. The uncertainty and inequality of rates in different districts reacted unfavourably upon trade, introducing an element of speculation into business transactions. Competition for grain traffic in particular involved the companies, and consequently the Government, in serious losses. The railways endeavoured to direct grain freights to harbours in accordance with their individual interests,¹ the north-west lines trying to send them to the Baltic ports and Koenigsberg, the southern railways to the Black Sea ports. Hence a "rate-hole" was formed in the city of Kursk, i.e. transport rates from this contestable point were extremely lowered. In general, grain rates were so low that the railways transported grain at a loss.

The Government, therefore, determined to intervene, and replace the chaos prevailing in tariff affairs by a clear and uniform system. The Law of 8 March, 1889, brought the question of the tariffs on Russian railways, State and private, wholly within the jurisdiction of the Government : ² the rôle of the railway companies themselves was limited to lodging the proposals of interested and competent organizations. Three institutions were established to deal with tariff matters, the Department for Railway Affairs, the Tariff Committee, and the Advisory Board for Tariff Affairs, the main responsibility and authority resting on the second. It consisted of nine members, viz. the President, two members from the Ministry of Finance, and two from the Ministry of Trade and Industry, one each from the Ministries of Ways of Communication, Agriculture and State Domains,

¹ *The Status of Private Railroad Business in Russia*, published by the Youraveta Home & Foreign Co., New York, 1918, p. 10 *et seq.*

² Raffalovich, A., *Russia*, etc., p. 247.

State Control, Internal Affairs. As a result of its activities, a thorough revision and unification of the tariff was carried through and completed in the comparatively short space of four and a half years.

In Russia railway tariffs were not based on purely business principles, determined by the nature and value of the goods themselves, and the technical specialities of the lines transporting them, but to a large extent depended on the general character and tendency of the Government's economic policy. Thus they were so arranged as to further the Customs policy of protecting home industries against imported goods, of facilitating the export of the country's products, of developing the trade of given districts, of regulating competition between different districts and branches of trade. "Privilege" ("Lgotny") tariffs with special aims were also established, e.g. for facilitating colonization, aiding famine-stricken districts, furnishing farmers with fertilizers, seeds, agricultural implements.¹

Another aim of the Government's policy in connection with railway building was to encourage the use of materials of home production for the construction of the lines and of the rolling stock. At the beginning of railway construction, industry was practically non-existent in Russia, hence all the materials required had to be obtained abroad. Later, to encourage home industry, which especially in the twentieth century was beginning to make great progress, the Government demanded on the charters of newly formed railway companies that materials of exclusively home production should be used. Exceptions were only allowed by special permit granted by the Ministries of Ways of Communication and Finance. This policy was the subject of much criticism. The complaint was made that it added considerably to the cost of construction, since home materials were much more expensive than foreign: also in some cases the necessary articles were not produced within the country at all. It was also held by some that a purely artificial stimulus was thus given to the iron and steel industry.

¹ Appendix E. Revisions of the tariff since 1889.

The warehousing system prevailing on Russian railways is not found on the lines of the other countries of Western Europe.¹ A railway may not be able to immediately despatch goods offered to it for transportation. It is nevertheless obliged to accept the goods and register them in a registration book. It thus becomes responsible for the storage of the goods entrusted to it, although not responsible for the time required in getting them to their destination. Hence owing to congestion of traffic at Odessa and other ports, on the realization of the harvest, grain might often be left lying on the ground after all the storehouses had been filled.² Connected with the warehouse system was the practice of advancing loans to the sender on the security of the storage document. These documents circulated like ordinary bills of exchange.

STATE MANAGEMENT AND THE FINANCE OF RAILWAY CONSTRUCTION.

We have seen how the whole question of railway construction in Russia gradually came under the control of the State in all its departments. Forced at first to give its guarantee in order to attract the capital required for construction, the State found in time that it had to assume the actual work of management in order to save itself from serious losses. The development of industry with its increasing calls for transport facilities, the need for bringing the extremities of the Empire within the railway net, the necessity of constructing strategic lines in view of Russia's growing significance in the sphere of European politics, all combined to necessitate increasing expenditure on railway construction. It is open to question how far this expenditure was reimbursed out of the net profits of the railways, and how far it constituted a burden on the national finances.

¹ *The Status of Private Railroad Business in Russia*, op. cit., l.c.

² *Vide Proceedings of the Duma (R.)*, 9 March, 1910, Speech of Rukhlov, p. 190. He states that although 1909 was a record year for the transport of grain there were no complaints of congestion. Grain was left lying because the receiving stations were not prepared to accept it, not because the railways were unable to transport it.

Before attempting to come to a decision, it will be well to draw a dividing line between the periods before and after 1908, since data from various sources would seem to indicate that year as being a turning point in railway affairs in Russia. Before 1908 the results of railway exploitation were frankly uneconomic. Certainly the earlier abuses of private management had been remedied, and only purely strategic lines, or those of Asiatic Russia, which had been built with the object of opening up Siberia and could not be expected to pay for some time, failed to pay their own expenses at least, if they did not yield a surplus. But apart from merely paying their way, the railways had to provide interest on the enormous debt contracted on their behalf, before they could really be said to be a profitable concern. Hence statistics which merely show the participation by the Treasury in the "profits" of private railway companies, or the "revenue" derived by the Government from State railways are not a complete indication of the position. Figures illustrating these two points would lead one to the conclusion that railway enterprise was established on a firm economic foundation. For example, the *Messenger of Finance*¹ gives the following figures as regards the share of the Government in the profits of private railway companies :

	In 1,000 Roubles.			
	1910.	1911.	1912.	1913.
Paid as dividends . . .	16,590	15,720	18,509	21,500
Handed over to Treasury .	29,058	29,872	36,142	45,666
Total net profit . .	45,648	45,592	54,651	67,166

The revenue derived by the Government from the State railways also played a part of increasing importance in the annual Budgets of the Empire. In 1903 it amounted to 453 million roubles, in 1909 to 568 million roubles, and in 1913 to 813 million roubles.

The extent of the obligations undertaken by the State

¹ *Messenger of Finance*, No. 10, Year 1914 (R.), p. 434 *et seq.*

on behalf of railways must however be taken into consideration. This is reflected in the movement of the National Debt,¹ which in 1912 showed the "railway debt" to amount to more than one-third of the total National Debt. In round figures the National Debt amounted to 8.8 million roubles, the amount contracted on behalf of railways to 3.1 million roubles.

The actual amount of Government expenditure and returns on the railways, State and private, in 1912, apart from the cost of construction of new lines, amounted to over £56 million sterling. The receipts totalled over £72 million sterling, leaving a credit balance of approximately £16 million.²

It remains to be seen what is comprised in the "railway debt." It consists of debt (a) contracted by the State for constructing State railways, (b) contracted by the State on behalf of railway companies. These companies make good the interest out of earnings, also pay a share of their net profits to the State. (c) Originally contracted by railway companies and taken over by the State when the railways were expropriated. The railway debt was, however, larger than it appeared in the official statement. Part of the State Debt classed as being applied to "general needs" was in reality utilized to cover the costs of State lines, e.g. the Siberian, the Amur line, etc. The State also guaranteed certain bonds issued by railway companies which are not included in the return of the National Debt. The total amount of debt contracted on behalf of railway construction up to 1908 was estimated at £500 million, or more than one-half of the total amount of the State Debt. If interest on this is calculated at 4½ per cent., the net return of £16 million annually is turned into a yearly loss of over £6 million.³

Further illustration of the uneconomic side of railway management is provided by an interesting document to

¹ Op. cit., No. 3, Year 1914, p. 99, Appendix F, Movement of the National Debt in 1912.

² P.P. Consular Reports, *Report on the Russian Budget for the Year 1912*, Mr. H. O'Beirne, *vide* Appendix G for detailed figures.

³ *Vide* Appendix H for statistics as to losses inflicted on the Treasury through the exploitation of the railways.

be found in the proceedings of the Third Duma.¹ It is a speech by Mr. Godnyev, in which he gives an account of the findings of the Special Duma Committee, corresponding to the Committee on Public Accounts in England, which had investigated the realization of the Budget for 1908. As a result of its inquiries, which extended over a period of four years, the Committee had succeeded in establishing the main features of (a) State railway management, (b) military and naval administration, and (c) development of the mercantile marine, of ports, etc. The section dealing with railway administration starts with a comparison of the results attained by State and private exploitation of the railway net respectively. A few of the statistics given will illustrate the position in 1908.

The extent of the railway net was 60,929 versts, of which 41,555 versts were exploited by the State, and 19,374 versts by private companies. The total nominal amount of railway loans raised up to 1908 was 4,478 million roubles, of which sum 2,929 million roubles were raised by the State and 1,548 million roubles by private companies. Of the money raised by the State, 2,660 million roubles were directed to the use of State-owned railways, and 265 million roubles went to the assistance of companies. In addition to these 4,478 million roubles of loans, 2,056 million roubles had been advanced directly from the Treasury for railway enterprise, 25.9 million roubles of which were granted to companies. A total of 6,534 million roubles is therefore arrived at, 4,726 million roubles being for State railways, and 1,808 million roubles for private lines. Having established this fact, the Committee went on to investigate the amount of interest which was to be paid in return for this expenditure. Up to 1908 the interest payable on State-owned lines amounted to 201.6 million roubles, on private lines 76.5 million roubles, making a total of 278.1 million roubles. The interest (at 4½ per cent.) payable for the Treasury's advance was 90.6 million roubles.²

¹ *Proceedings of the Duma (R.)*, 23 January, 1912, p. 732 *et seq.*

² The statement as to the percentage paid on railway loans disposes of the contention that interest paid to foreign investors was exceptionally

The Committee established the fact that by the end of 1908 the total railway debt which remained unredeemed amounted to 4,106.9 million roubles. Only 76.2 million roubles represented non-guaranteed debt, showing the importance of the Government guarantee. Mr. Godnyev stated the average cost per verst to be 107,247 roubles, the cost of State-owned railways exceeding that of private lines by 20,406 roubles per verst. Hence the interest per verst on State lines had to be 4,888 roubles, while private lines only had to pay 3,971 roubles per verst. The general result for the Treasury of the exploitation of the railways for 1908 was a deficit of 118.5 million roubles, of which the State railways were responsible for 103.7 million roubles and the private lines for 14.8 million roubles.

Mr. Godnyev places the blame for this unsatisfactory state of affairs largely upon the defects of actual State management, upon which he proceeds to shed a somewhat lurid light by giving instances from the construction and management of a number of lines. In the arrangements made with contractors for the construction of the Amur line, he stresses the lack of legal safeguards for the Treasury in case of negligence in the performance of the work, delay in its completion, expenditure in excess of what had been estimated to be necessary. He instances the case of the Orenburg-Tashkent line where expenditure in excess of estimates was called forth mainly by lack of proper investigation into the water-level of the river Oxus. Hence a subsequent rise in that level resulted in considerable damage to the track by flooding, necessitating extensive repairs which had to be paid for by the Treasury. He cites other irregularities, all of which involved serious losses to the Treasury, such as the securing of construction contracts by large contractors, who subsequently transferred these to smaller firms, retaining a considerable portion of

high. The greater part of the railway loans were raised abroad, but 81 per cent. of these, with a nominal capital of 3,638 million roubles were concluded at 4 per cent., 299.4 million roubles were raised at 3 per cent., and only 70 million roubles at 5 per cent.

Dr. Ischchanian, *op. cit.*, Chap. 17, pp. 218-35 dwells in detail on the rôle of Western investment in Russian railways.

the Treasury payment as a premium for themselves ; extravagance in the shape of luxurious station buildings in thinly populated districts ; payment for the compulsory taking of land and compulsory purchase far in excess of the amount which would have been fixed by arbitration ; the deliberate raising of prices by contractors for such essentials of railway construction and running as naphtha, coal, iron. In the case of the Tashkent line it was even established that bridges, specially mentioned in the report on the completion of the line, did not exist at all, an unfortunate omission which caused serious disorganization of traffic when the waters of the river Oxus rose, and flooding took place.

These enormities, as they appear to Western eyes, seem less astonishing when we consider the geographical remoteness of the Asiatic tracks from the industrial and labour markets of European Russia. Much more striking are the similar irregularities which he quotes as occurring on various European lines. The affair of the bridge over the Dnieper may be quoted as a typical example. The construction of a bridge over that river, on the Second Ekaterin railway, had been entrusted to the Bryansky works. The completion of the plan took $2\frac{1}{2}$ years, and the actual work of construction was very slowly carried out. In 1907 the Ministry of Ways of Communication became impatient at the delay and suggested paying an extra premium to the works if they would hasten the completion of the contract. To this, however, the State Control objected, and insisted on the more salutary method being adopted of warning the managers that they would get no more Government orders if they did not carry out the contract entrusted to them with greater promptitude. As a result, the works were stimulated to greater efforts, and the bridge was completed in February, 1908, not, however, before the delay had involved considerable loss to the Treasury by hampering traffic on that railway. The picture Mr. Godnyev gives of the construction and management of railway lines as carried out by private companies is no less gloomy, the possession of the Government guarantee re-

leasing them from the necessity of enforcing economies.¹

After 1908, however, a slow but distinct improvement in railway affairs is to be traced in the various speeches in the Duma on this department of State activity. Mr. Aleksyenko, when laying the report of the Budget Commission before the Imperial Duma in November, 1912, admitted that up to 1908 the State management of railways had been chaotic, unsystematic and uneconomic.² Improvements had, however, been enforced, with a view to putting the railways on a profitable basis, and these reacted favourably upon the revenue which they earned. Previously this revenue had been adversely influenced by the obligation of carrying mails without payment, of transporting various officials, railway and other, without payment, also troops and settlers to Siberia at very low rates.³ This was remedied to some extent, and the general lowering of the passenger tariff also stimulated traffic, and brought in increased returns. Evidently the ticket-collecting system was not particularly good, since the extension of the fourth-class passenger service was recommended on the ground that it would decrease the temptation to travel without any ticket at all.⁴ These improvements, coupled with the excellent harvests of 1909 and 1910, resulted in the striking increase of railway revenue seen from the following figures : ⁵

REVENUE FROM STATE LINES.

Years.	In Million Roubles.
1908	512
1909	586
	626
1911	708
1912	742

¹ *The Russian Economist*, op. cit., Vol. II, No. 7, pp. 2,490-7. "The Past of the Russian Railway Economy," by Engineer A. A. Bublikov. The author attributes the defects of the Russian railway system to the fact that the Government did not build the original lines on a sufficiently bold plan. Too little money was granted for railway construction, hence the earlier lines were built with technical defects—unduly steep gradients for example—which badly handicapped the whole system as the density of traffic increased. He refers to the brilliant accomplishments of Russian railway engineers in overcoming the difficulties of organization of traffic, etc., which these fundamental defects in construction involved.

² *Proceedings of the Duma* (R.), 23 November, 1912, p. 3,212.

³ *Encyclopædic Dictionary* (R.), Vol. on "Railways," p. 808.

⁴ *Proceedings of the Duma* (R.), 21 April, 1912, p. 3,041, also 23 May, 1913, p. 1,365, Herzenvitz. ⁵ *Ibid.*, 10 May, 1913, p. 899, Aleksyenko.

It was a cause for satisfaction that this enormous increase in revenue was accompanied by an almost stationary expenditure, an economy which was not, however, effected by lessening the salaries of the railway staff or by neglect of the rolling stock.¹ The amount of expenditure from 1908-12 was as follows:

Expenditure on working of State lines (apart from improvements, or construction of new lines).

Years.							In Million Roubles.
1908	.	.	.	.	.	.	445
1909	.	.	.	.	.	.	437
1910	.	.	.	.	.	.	432·8
	.	.	.	.	.	.	459·5

In spite of the constant increase in the net income derived from the railways, a net profit to the State, i.e. the net income less the interest payable on the capital sunk in construction, only emerged in 1911. In that year it amounted to 60 million roubles, and a rise in the cost of materials and in the expense of maintaining the railway staff prevented it rising much above that figure during the next few years.²

It seems clear, therefore, that on the outbreak of the war, Russian railways were just beginning to be a paying proposition. Before then their construction imposed a strain upon the national resources. On the one hand, strategic considerations, and the need for railways in connection with the development of industry and commerce, urged upon the Government the necessity of building an adequate railway net. On the other hand, the country

¹ *Proceedings of the Duma* (R.), 21 April, 1912, p. 3,057, Kozyrev, President of the Council of Engineers. The opposite opinion is, however, expressed in *National and State Economy*, published by the Peoples' Commissariat for Finance, Moscow, 1923 (R.), Section IV "Transport," Chap. I, "Railways," p. 429. The writer maintains that receipts were only secured by refraining from necessary expenditure on the upkeep of the rolling-stock, etc.

² *Ibid.*, 23 May, 1913, Herzenwitz. Note that Shingarev, 23 April, 1914, p. 837, declares the increase in revenue to be illusory. According to him, it was based on the raising of the tariff rates on coal, sugar, timber, salt, bran, flour, manufactures, etc., and was not due to any improvements in management.

was not yet economically able to support this net, which had therefore to be built mainly by the help of foreign capital, attracted by the State guarantee, and State control of the lines. It is, of course, obviously impossible to adopt the attitude that it is only justifiable to build railways which yield an immediate revenue; it is the business of the Government to look ahead and judge probable results, and therefore to build lines which will stimulate economic development, and justify themselves by indirect or ultimate results. But it is equally necessary for the Government to hold the balance, and not impose too great a strain on the present in reliance on future benefits.

If an international comparison is made as regards activity in railway building between 1890 and 1913, Russia is seen to stand easily first among the countries of Europe. During that period she built 31,200 kilometres of railway line; Germany came second with 20,800 kilometres and Austria-Hungary third with 19,100 kilometres.¹ In spite of this, however, Russia's railway net remained quite insufficient as compared with the extent and needs of the country. She occupies a very unfavourable position in statistics showing the extent of the railway net as compared with, (a) the total extent of the country, and (b) the length of the net per 10,000 inhabitants. At the end of 1913, she had only one kilometre of railway to each 100 square kilometres of territory, whereas Belgium had 30, Great Britain and Ireland 12, Germany and Switzerland also 12 each. For each 10,000 inhabitants Russia's extent of railway net was 5 kilometres, as compared with 27 kilometres in Sweden, 15 in Denmark, 14 in Switzerland, and 8 in Great Britain and Ireland.²

Russia's large extent of waterways was some compensation for the insufficiencies of her railway net, but it has to be remembered that these are ice-bound in winter and shallow in summer. Further, the roads in Russia are inferior to those in the countries of Western Europe, and her extent of sea-coast is very small compared to her territory. It is therefore obvious that in 1914 Russia still had a very con-

¹ Appendix I for detailed figures.

² Appendix J for detailed figures.

siderable task before her to satisfy the growing needs of the country for transport facilities.¹

¹ The economic disorganization following upon the revolution of 1917 was specially keenly felt in the transport system. Probably some years will elapse before it is even restored to pre-war level, after which very considerable progress will have to be made if Russia is to resume her position as a significant factor in international trade. For information on the present state of the railways *vide National and State Economy* (R.), op. cit., Section IV, "Transport," Chap. I, "Railways."

APPENDIX.

ROADS, CANALS AND WATERWAYS.

TABLE A.

The Russian Year Book for 1915, N. Peacock.

Roads under the control of the Ministry of Ways of Communication, 1 January, 1912.

Roads under	1,000 Versts.			
	Causeways.	Paved Roads.	Natural Roads.	Total.
1. Direct control of Ministry	10,862·7	353·7	1,124·5	12,340·9
2. Control of Zemstvos	4,496·9	45·3	42·6	4,584·8
Total	15,359·6	399·0	1,167·1	16,925·7
The same in regions.				
European Russia	9,431·6	188·4	42·9	9,662·9
Poland	3,007·5	207·6	—	3,215·1
Caucasus	2,920·5	3·1	1,124·1	4,047·7
Siberia	—	—	—	—
Central Asia	—	—	—	—
Total	15,359·6	399·1	1,167·0	16,925·7

Roads under the control of the Ministry of the Interior, 1 January, 1910.

	Causeways.	Paved Roads.	Natural Roads.	Total.
European Russia	6,607·5	4,451·1	448,051·8	459,110·4
Poland	4,803·8	168·9	60,511·0	65,482·9
Caucasus	1,753·3	12·4	16,670·7	18,436·4
Siberia	—	—	108,152·5	108,152·5
Central Asia	131·0	1·3	56,313·6	56,445·9
Total	13,294·8	4,633·7	689,699·6	702,628·1

	Causeways.		Stone Roads.		Total.	
	Per 1,000 square Versts.	Per 1 million Inhabitants.	Per 1,000 square Versts.	Per 1 million Inhabitants.	Per 1,000 square Versts.	Per 1 million Inhabitants.
European Russia	37·9	135·2	10·9	39·0	48·8	174·2
Poland	701·1	644·8	32·8	30·2	733·9	675·0
Caucasus	111·6	392·0	0·4	1·3	112·0	393·3
Siberia	—	—	—	—	—	—
Central Asia	0·4	13·1	—	0·1	0·4	13·2
Average throughout the Empire	15·2	177·9	2·7	31·2	17·9	209·1

TABLE B.

The Russian Year Book for 1915, op. cit., p. 263.

The navigable lengths of the rivers of European Russia, in miles, arranged according to the seas into which they fall.

1. Flowing into the *Caspian Sea*: Basin of the Volga, 19,060 ; others, 799.
2. Flowing into the *Black Sea*: Basins of the Don, 2,508 ; Dnieper, 6,300 ; Southern Bug, 90 ; Dniester, 534 ; others, 918.
3. Flowing into the *Baltic Sea*: Basins of the Vistula, 2,016 ; Nieman, 2,013 ; Western Dvina, 2,700 ; Narova and lakes, 1,140 ; Neva and lakes, 4,398 ; others, 1,038.
4. Flowing into the *White and North Seas*: Basins of the Onega, 804 ; Northern Dvina, 3,954 ; others, 2,361.

The Volga contains 38 per cent. of the whole network of waterways in European Russia, the Dnieper 13 per cent., the Neva 9 per cent., the Northern Dvina 8 per cent., the Don 5 per cent., the Western Dvina, 5 per cent., the Nieman and Vistula, 4 per cent.

TABLE C.

The same for Asiatic Russia.

1. Flowing into the *Arctic Ocean*: Basins of the Ob, 16,869; the Enessei, with Lake Baikal, 11,808; the Lena, 6,864; others, 5,443.
2. Flowing into the *Seas of Behring, Kamchatka, and Japan*: 1,053 miles.
3. Flowing into the *Sea of Okhotsk and the Straits of Tartary*: the Amur, 8,541; others, 1,446.
4. Flowing into the *Sea of Aral*: the Amur-Daria, 927; others, 774.

TABLE D.

Kondratiev, N.P., *The Corn Market*, Moscow, 1922 (R.), p. 17.
Transport of all kinds of cereals, wheat, oats, barley, rye.

Yearly Average.	By Rail.	By Water.	Relative Percentage.		Both by Rail and Water.	Proportion Rail.
			Rail.	Water		
1895-1900	Poods.		100	100	100	76·4
1901-1905			135	134	134·6	78·5
1906-1910			160	135	151·8	80·5
1909-1913	1,270,003·4	300,567·8	181	136	171·0	80·9

The growing importance of railway transport will be noted.

SHIPPING.

TABLE A.

Russian Year Book for 1915, p. 286, et seq.

Sums appearing in the Budget estimates from 1910-14 in respect of subsidies for shipping and shipbuilding.

Year.	Encouragement of Mercantile Marine.	Subsidies to River Steamship Companies.	Encouragement of Ship-building.	Total.
	£	£	£	£
1910	434,917	51,722	10,582	497,221
1911	461,069	55,060	10,582	528,711
1912	734,434	47,301	10,582	792,317
1913	—	—	—	564,841
1914	—	—	42,104	452,822

Companies continuing to receive subsidies in 1914.

Volunteer Fleet :

For regular trips between Vladivostok and Okhotsk and the Behring Sea ports, and the Tatar Straits lines .

£53,356

Voyage to the estuary of the River Kolyma

6,775

Voyage to the estuary of the Lena

4,437

£64,568

Odessa-Vladivostok Line

18,778

Loan without interest for 25 years

412,631

Count Keyserling :

Regular trips between Vladivostok and Tiutikha and Datta

7,936

Russo-Danube Steamship Company :

Regular voyages between the Black Sea and the Danube ports, 1914-15.

32,966

Loan without interest in 1914

84,210

Loans

357,895

Kavkaz and Mercurii :

Voyages on the Caspian Sea and the Volga

30,350

£30,350

£1,009,334

TABLE B.

Messenger of Finance, No. 30, 1914 (R.), p. 123.

Distribution of the mercantile fleet between the different seas.

Name of Sea.	Steamships.	Motor Boats.	Sailing Vessels.
Black Sea and Sea of Azov. .	416	} 48	887
Baltic Sea	265		719
White Sea	80		415
Caspian Sea	244	17	570
Pacific	39	4	6
	1,044	59	2,597

TABLE C.

Ibid. Sailing vessels on the various seas as percentage of the total number and of the total tonnage.

Sailing Vessels on	Percentage of total Number.	Percentage of total Tonnage.
Black and Azov Seas	66.9	17.0
Baltic Sea	72.5	35.7
White Sea	68.6	48.8
Caspian Sea	82.5	62.3

THE RAILWAY SYSTEM.

TABLE A.

Messenger of Finance, No. 16, Year 1914 (R.), "Our Railway Net and its Historical Development."

Statistics of railway construction from its beginning up to 1904.

Years.	Versts built.		
	By the State.	By Railway Companies.	Total.
1838-53	954	25	979
1857-64	—	2,379	2,379
1865-74	1,204	12,367	13,571
1875-80	—	4,294	4,294
1881-94	5,541	5,816	11,357
	7,704	24,876	32,580
1894-1904—			
European Russia	3,597	11,653	15,250
Caucasus, Siberia, Central Asia	7,002	—	7,002

But even this very considerable progress was insufficient to satisfy the growing needs of the country, the intensity of the traffic increasing more quickly than the length of the lines.

Year.	Length of railway net.	No. of pood versts of goods carried.
1880 .	21,000 v.	454 milliards
1903 .	51,000 v.	2,300 „
		2½ times increase
		5 times increase.

TABLE B.

Messenger of Finance, No. 10, Year 1914 (R.), p. 434, "The Tariff Institutions and the Department for Railway Affairs, from 1889-1914."

Figures showing the general progress of the railway net from 1905-13; and transition to State control.

Year.	Opened to Traffic.			Total in exploitation at the end of the Year.	Including	
	Total in Versts.	Including			State.	Private.
		State.	Private.			
1905	1,196	1,091	105	57,811	38,627	19,184
1906	1,753	1,554	199	59,854	40,454	19,400
1907	1,607	991	616	62,057	42,043	20,014
1908	353	345	8	62,471	42,399	20,072
1909	413	371	42	62,901	42,829	20,072
1910	65	65	—	62,987	42,915	20,072
1911	1,378	199	1,179	64,334	43,116	21,218
1912	702	87	615	65,119	43,975	21,144
1913	848	672	176	65,927	44,590	21,337

Mertens, Dr. O., *Dreissig Jahre* etc. Ch. XIX, p. 93.

Figures showing the process of transition to State control from the time it was begun in the '80's of the nineteenth century, up to the year 1911.

Construction of Railways.

Year.	Versts.	European Russia.	Asiatic Russia.	State Lines.	Private Lines.
				Per cent.	
1886	25,582	24,284	1,298	13.3	86.7
1891	28,809	27,165	1,644	34.7	65.3
1896	37,179	33,676	3,503	61.4	38.6
1901	51,937	43,836	8,101	68.3	31.7
1906	58,285	48,143	10,142	70.4	29.6
1911	61,684	51,428	10,256	69.0	31.0

Division of traffic between State and Private Railways.

Years.	Passenger Traffic (in Million Passengers).			
	State.		Private.	
	Millions.	Percentage of total Passengers.	Millions.	Percentage of Total.
1882-86	1.8	4.8	35.8	95.2
1887-91	6.0	13.8	38.1	86.4
1892-96	28.5	49.9	28.6	50.1
1897-1901	67.7	71.8	26.6	28.2
1902-6	91.9	73.6	33.0	26.4
1907-11	133.2	74.2	46.3	25.8

Goods Traffic (in poods).

	State.		Private.	
	Poods.	Percentage of total Traffic.	Poods.	Percentage of total Traffic.
1882-86	193.8	6.4	2,836.0	93.6
1887-91	682.0	16.8	3,382.3	83.2
1892-96	2,663.0	50.3	2,634.4	49.7
1897-1901	5,760.8	69.5	2,530.4	30.5
1902-6	7,748.1	72.1	3,004.1	27.9
1907-11	11,979.1	75.5	3,877.7	24.5

TABLE C.

National and State Economy (R.), Section 4, "Transport," Ch. I, "Railways," p. 426.

Increase of Traffic in Food-stuffs.

Despatched	In 1905.	In 1913.	Increase.	
	Million Poods.		Million Poods.	Percentage.
Cereals	967	1,297	330	34·1
Salt	92	124	32	34·8
Sugar	75	137	62	82·7
Groceries	18·6	29·8	11·2	60·2
Fish	36·6	67·4	30·8	84·2
Butter and poultry .	13·0	20·6	7·6	58·5
Oil seeds	14·5	26·6	12·1	83·4
Total	1,216·7	1,702·4	485·7	39·9

TABLE D.

Ibid. Increase of Traffic in Products of Industry and Raw Materials.

Despatched.	In 1905.	In 1913.	Increase.	
	Million Poods.		Million Poods.	Per-centage.
Coal	782	1,709	927	118·5
Ores	231	560	329	142·4
Iron and cast iron . . .	144	291	147	102·1
Iron manufactures . . .	67	145	78	116·4
Petroleum	229	269	40	17·5
Peat	9·7	21·5	11·8	121·6
Charcoal	8·9	26·4	17·5	196·6
Timber	240	438	198	82·5
Building material . . .	285	760	475	166·7
Wood for building . . .	323	731	408	126·3
Manufactures	38·7	54·5	15·8	40·8
Cotton	22·4	35·3	12·9	57·6
Hemp and flax	27·0	33·3	6·3	23·3
Total	2,407·7	5,074·0	2,666·3	110·8

TABLE E.

Messenger of Finance (R.), No. 10, 1914, p. 486.

Revisions of the tariffs on the railways since 1

Since 1889, the following revisions of the tariffs for important goods have been carried out: *wheat*, 6 revisions, in 1889, 1893, 1896-7, 1900-1, 1905-6, and 1910, with a view to raising the tariffs to a profitable level, also to furthering the interests of agriculture, the grain trade, and the milling industry; *coal* tariffs revised 1890, 1895, 1907-8, with the aim of discouraging the use of foreign coal in the home market, and developing the consumption of the home product; *iron*, *pig-iron*, and *steel* tariffs were revised with the same object in 1891, 1897, 1907-8, 1909, 1910; *naphtha* tariffs revised in 1891, 1894, 1896, 1897, 1904, 1910, to encourage the use of that product in the home market, and ensure the advantageous marketing of the surplus abroad.

TABLE F.

Messenger of Finance, No. 3, 1914 (R.), p. 99.

Movement of the National Debt in 1912.

	For needs		Total.
	of State.	of Railways.	
Debt :			
Decreased by . . .	262,839,738	16,660,773	279,500,511
Increased by . . .	122,151,843	57,527,304	179,679,148
As a general result, State needs debt decreased by	140,687,894	40,866,531	—
Railway debt increased by	—	—	—
Final result, total debt decreased by . . .	—	—	99,821,363

On 1 January 1913, the Debt =

General State needs	5,742,913,163
Railway needs	3,115,140,682

8 858 052

TABLE G.

Parliamentary Papers. Consular Reports. *Report on the Russian Budget for the year 1912*, by Mr. H. O'Beirne.

Government expenditure and returns on railways, State and private, in 1912.

Outgoings.

	£
Subsidies to railway companies	1,600,000
Working expenses, maintenance, etc. (of State lines)	54,600,000
Total	<u>£56,200,000</u>

Returns.

	£
Receipts from railway companies	68,300,000
Share in profits of companies	2,000,000
Repayments of former advances to companies	1,900,000
Total	£72,200,000

Net return therefore = £16 million.

TABLE H.

Ischchanian, B., *Die ausländischen Elemente in der russischen Volkswirtschaft*, Berlin 1913, p. 230.

Losses inflicted upon the Treasury through the exploitation of the railways.

Year.	Extent of Railways (in Versts).	Paid by Treasury to cover Deficit.		Net Income returned to Treasury.	
		Total.	Per Verst.	Total.	Per Verst.
		In Roubles.		In Roubles.	
1885	24,391	49,500,771	2,029	—	—
1890	28,745	24,870,708	865	—	—
1895	35,138	—	—	1,780,373	51
1896	37,375	—	—	11,287,636	302
1897	39,392	—	—	3,013,586	76
1898	42,268	—	—	8,762,470	207
1899	47,150	—	—	1,215,300	26
1900	50,129	2,646,111	53		
1901	53,419	35,149,842	658		
1902	54,366	40,370,024	743		
1903	54,825	20,561,695	375		
1904	55,959	32,586,828	582		
1905	57,410	89,545,226	1,560		
1906	59,771	113,402,774	1,897		
1907	60,537	119,967,249	1,982		
1908	—	98,000,000	—		
1909	—	—	—		
1910	—	80,000,000	—		

He attributes the good results of the years 1895-9 to a series of bountiful harvests, and the rapid development of trade and industry. Against this five-year surplus of an average of 132.40 roubles per annum, there has to be set a twenty-year deficit of an average of 1,026.55 roubles per annum.

TABLE I.

Westermanns' "Weltatlas." Adolf Liebers. Braunschweig and Hamburg, 1922. Page facing plate 36.

Comparative figures as to the railway nets of Russia and other European countries.

Country.	Length of Railway Net.		Increase.
	In 1890.	In 1913.	
	In kilometres.		
Germany	42,900	63,700	20,800
<i>Russia with Finland</i>	31,000	62,200	31,200
France	36,900	31,200	14,300
Austria-Hungary	27,100	46,200	19,100
Great Britain and Ireland	32,300	37,700	5,400
Italy	12,900	17,600	4,700
Spain	9,900	15,400	5,500
Sweden	8,000	14,500	6,500
Belgium	5,300	8,800	3,500
Switzerland	3,200	4,900	1,700
Denmark	2,000	3,700	1,700
Rumania	2,500	3,760	1,260
Holland	2,850	3,260	410
Norway	1,560	3,100	1,540
Portugal	2,150	2,980	830
Turkey in Europe	880	1,990	1,110
Bulgaria	880	1,930	1,050
Greece	770	1,610	840

TABLE J.

Ibid. Comparison of the lengths of railway nets at the end of 1913.

(a) *with the extent of each country.* For each 100 sq. kilometres, there were in

	Kilometres of railway.
Belgium	30
Great Britain and Ireland	12
Germany	12
Switzerland	12
Denmark	10
Holland	10
France	10
Austria-Hungary	7
Italy	6
Portugal	3
Sweden	3
Spain	3
Rumania	3
Greece	3
Serbia	2
Bulgaria	2
Russia	1 ¹
Norway	1

(b) *with the number of inhabitants.* For each 10,000 inhabitants there were in

	Kilometres of railway.
Sweden	27
Denmark	15
Switzerland	14
France	13
Norway	13
Belgium	12
Germany	10
Austria-Hungary	9
Great Britain and Ireland	8
Spain	8
Greece	6
Rumania	6
Portugal	6
Holland	6
Italy	5
Russia	5
Bulgaria	5
Serbia	4

¹ Given as 0.22 by Kondratiev, op. cit. p. 21.

Part V.
INDUSTRY.

(a) MANUFACTURING INDUSTRY.

CHAPTER X.

INDUSTRIAL DEVELOPMENT.

THE DEVELOPMENT OF FACTORIES.

THE development of large-scale industry in Russia was based first of all on the desire of the Government to emancipate the country from dependence on foreign supplies of manufactured goods. Its aim was to render Russia an entirely self-sufficing and independent entity, which would remain apart from the countries of the West. Another motive was to find an outlet for that section of the population which could not be fully employed on the land.

Throughout the eighteenth century, and during the greater part of the nineteenth, industry occupied a very insignificant part in the general economic structure of the country. It was only in the late nineteenth century that Russia entered seriously upon the transition from an almost purely agricultural, to an industrialized state, a transition which had been accomplished at an earlier date by America, and which was to be entered upon later by India. In the case of Russia, there were many factors which rendered the difficulties of adjustment especially acute. The mass of her population were peasants of a very low standard of culture, who only slowly and painfully adapted themselves to industrial conditions. The unsatisfactory condition of transport rendered the marketing of industrial products a matter of considerable difficulty, and the whole process of industrial development was surrounded by violent theoretical controversies.

The historians of industrial development in Russia

usually trace its origins from three main types of factories, the "proprietary," the "votchinal," and the "peasant."¹ The "proprietary" (or "possessional"—"possessionniy") factory² arose, not from any natural process of economic growth, but from the deliberate desire of Peter the Great,³ who saw that, if Russia was to emancipate herself from dependence on Western Europe, she must develop industry, so as to be able to equip her army and navy with the products of home manufacture. Large-scale industry, as fostered by his efforts, for the production of arms and ammunition, cloth, linen, sailcloth, rested therefore on a basis of privilege and compulsion, it was a creation of the State, its sole aims were to serve the needs of the State. Factories were built with funds advanced by the Government, which also supplied them with forced labour, and then handed them over to be worked by private individuals, to whom numerous privileges were granted. Foreigners were encouraged to come and help in the process of organizing and conducting industry. The problem of securing a suitable labour supply also presented a serious difficulty. Even as late as the nineteenth century, factory labour was looked upon as a State obligation, workers were "conscripted" for the factory as they were for the army.⁴ Workers were mainly recruited from among the peasants of the State Domains, numbers of these being allotted to certain factories and bound to them in perpetuity. This class of "proprietary" peasants was supplemented from other sources. Manufacturers were given the right to compel certain classes to enter their factories, for example, beggars, children from foundling homes, the wives of soldiers on active service, criminals.

¹ On the whole question of factory development, *vide* Tugan-Baranovsky, M.I., *History of the Russian Factory*, Petrograd, 1898 (R.). Translated into German by A. Meines, "Geschichte der russischen Fabrik" in *Sozialgeschichtliche Forschungen*, Berlin, 1910.

² Law regulating the "possessional" factory: General Mining Statute, Ed. 1893 and subsequent supplements. Vol. VII of the *Code of Laws* (*Svod Zakonov*—R.).

³ He reigned from 1689–1725.

⁴ Lyakhov, Arsene, *The Basic Features of Social and Economic Relationships in the Time of Alexander I*, Moscow, 1912 (R.), p. 101, etc., "The Structure of Industry."

The "votchinal" factory was of more spontaneous growth.¹ Landowners often found that they could supplement their agricultural revenue, and make profitable use of the labour of their serfs, by conducting some industrial enterprise within their domains, such as mining, sugar-refining, distilling, tobacco-growing. As was the case with the "proprietary" factories, the labour employed was compulsory and unpaid, and factory service was very unpopular with the workers.²

The State-controlled type of enterprise, as embodied in the "proprietary" factory, gradually disappeared under the pressure of a more modern economic policy, the State surrendering most of its activities in this sphere to private initiative. The Emancipation of the serfs proved to be the death-blow to the "votchinal" factories, since most of the workers deserted the factory for the field, and the nobles, in most cases, lacked the necessary energy and ability to reorganize the enterprises on capitalistic lines.

The "peasant" factory generally originated from the presence of some trade in the district from early times, or from the imitation by some enterprising peasant of the technique of a neighbouring factory. The raw material was distributed to the peasants by the entrepreneur—usually himself a peasant who had amassed a certain amount of capital—and worked up by them in their own homes. In some cases it was found more convenient to house the workers together more permanently, and thus the modern type of factory was evolved.³ The industries taken up depended on the kind of raw material available in the district. For instance, a district in which forests abounded

¹ From the Russian word "votchina" meaning "patrimonial estate."

² An interesting description of a large estate on which this combination of agricultural and industrial work was carried on, is to be found in Gallenga, Antonio, *A Summer Tour in Russia*, London, 1882, Chap. X. The author describes the Vyksunsky ironworks on the Vyksa estate, which he visited on his journey up the Oka River.

³ For example, it was a peasant named Morozov who founded the cotton mill which afterwards became one of the largest and most important mills in Russia. *Vide* Odell, R. M., *Cotton Goods in Russia*, U.S. Bureau of Manufactures, Special Agents Series, No. 51, Washington, 1912, p. 36. Also Fraser, J. F., *Russia of To-day*, London, 1915, Chap. XIII.

would naturally take up the manufacture of articles in wood.¹ With the advent of the "peasant" factory compulsory unpaid labour had been definitely replaced by free paid labour on a contractual basis.

THE LOCALIZATION OF INDUSTRY.

The various factors governing the localization of industry, such as proximity to raw material and power, and presence of suitable labour, capital and organizing ability, were at work in Russia as in other countries. A glance at a map showing the distribution of industry,² will show its concentration in Poland, the Moscow region, the Donetz basin, the Urals, where deposits of coal and iron were found, and also round about Baku with its oil-wells. The patch of dark colour round Petrograd, however, showing the concentration of industry there, introduces the factor of political influence. Petrograd was artificially placed, again owing to the will of Peter the Great, far from the coalfields of the centre and south of the country. Industry became concentrated round it simply because it was the capital of the country, and the centre of civil and military administration. Since the transfer of the capital to Moscow a decrease in the industrial importance of Petrograd has been noted. The importance of the transport system in the economic life of Russia has been stressed.³ Since, however, the railway system was late in being developed, only such industries as developed at a corresponding date were influenced in their localization by the position of the railway lines. Industries which had established themselves previously, in order to secure the advantages of easy access

¹ For a description of this type of industrial development in the province of Kostroma, on the left bank of the Volga, *vide In the Forest*, a novel by Melnikov (in Russian). Its hero is a typical "tysyachnik," i.e. a peasant who has amassed a certain amount of capital (literally a man who possesses some 1,000 roubles). The entire population of twenty villages were working under his direction. All kinds of wooden goods were produced, from construction timber to household utensils. Other products were woollen goods—gloves, felt for hats and footwear—and iron produce, axes, nails, scales, etc.

² Brockhaus, *Encyclopaedic Dictionary* (R.), Vol. 54, p. 282.

³ *Vide* Section 4, "Ways of Communication."

to raw material, etc., often found themselves far from the railway when the latter was laid down.¹

THE EMPLOYING CLASSES.

The various classes of employers in Russia were connected with the various types of factories which have been noted. In the "votchinal" factory, the employer was naturally the landowner himself. The "proprietary" factory drew its directors partly from the trading class which had grown up around Moscow, and partly from abroad. The "peasant" factory was organized by the type described as "Tsyachnik." A very marked feature of Russian industry, however, was the presence of a considerable foreign element as the directing force in it. This was to be expected in a country where the enormous bulk of the population always had been, and has remained, predominantly agricultural, and where industry had been more or less grafted on to the natural structure of the country. Foreign experts had been invited to the country from the earliest beginnings of industry, and their assistance continued to be felt necessary. This was specially noteworthy in the cotton industry,² and in the great ironworks of the South, the pioneer of which was an Englishman, John Hughes.

The fact that a considerable amount of foreign capital was utilized for the development of industry was also partly responsible for the large foreign element in its control. In the years preceding the war, Germany had been taking a predominant rôle in this method of "peaceful penetration," by means of which the control of industry in Russia was gradually passing into non-Russian hands.³

There were some signs of the growth of a reaction against this process. The progress of general and of technical

¹ *Vide* Appendix A for the effect of the Revolution of 1917 on the distribution of industry.

² Odell, R. M., *Cotton Goods in Russia*, op. cit., p. 8. *Vide* later section on "Cotton," p. 249 *et seq.*

³ *The Edinburgh Review*, July, 1916. Pares, Prof. Bernard, *Russian Hopes and Aims*.

education was producing among the Russians themselves suitable types both for the tasks of entrepreneurs and of workmen. The nationalistic policy of the Government, backed by a growing nationalistic sentiment among the people, was directed towards a limitation, and final elimination, of foreign control. A typical expression of this policy was found in the law enacting that at least one member of every business firm operating in Russia should be of Russian extraction. It might often happen that only the letter of the law was observed, a Russian being paid to lend his name, while the real management of the concern remained in foreign hands.¹ But there was some tendency towards emancipation, although industry could not yet be said to have ceased to be an extraneous matter, and to have completely established its position as an integral part of the economic structure of the country.

THE WORKERS, FACTORY AND "KUSTAR."

With regard to Russia's labour supply, the outstanding feature was that the great majority of the workers were still predominantly peasants, by mentality and inclination. The Russian peasant's intense love for the land is a potent factor which has to be taken into account when studying any problem connected with him. The average worker in Russia, when forced to take up factory work, almost always regarded it as a painful and temporary necessity, from which he hoped sooner or later to be released, so that he might return to his village. This was especially strong where the worker either retained his plot of ground, or had relations in his home village who possessed land.² Even

¹ *Vide The Russian Fur-Seal Islands*, L. Stejneger, Washington, 1896, p. 91, for a description of how this was done in the sealing industry.

² In tracing the transition of the peasant from a purely agricultural to an industrial worker, Joseph Wilbois takes as his basis the unity of the peasant family. *Vide Les industries textiles. Études sur les répercussions sociales en Russie*, 1914. The family remained intact (1) where only younger members, not actually required for field labour, went to the nearest factory to get supplementary earnings, or (2) where the whole family was employed and housed in a rural factory. The family was disintegrated when the head of the household went to the town to work in a factory, leaving his wife and children in the village. They were

landless peasants, however, never gave themselves wholeheartedly to the factory. The crux of the labour problem in Russia therefore lay in this half-divorce of the worker from the soil. Russia did not possess a strongly organized and fully developed proletariat, and the problem of transforming a certain percentage of her population of peasant proprietors into a town proletariat presented serious difficulties.

This continued link with the land, and the consequent persistence of peasant traditions and habits, accounted for many of the shortcomings of the Russian worker in the sphere of industry. Some of the accusations brought against him were that he was slow, inattentive, careless, lacked initiative, and required a great deal of supervision. But these defects were due mostly to his peasant origin, and would tend to disappear as the divorce of the worker from the soil became more complete. Agricultural labour does not demand dexterity of touch or agility of movement. Communal life, with its lack of individual responsibility, did not tend to foster habits of enterprise and initiative. And the fact that the villages led isolated, self-sufficient lives, often cut off from communication with each other for whole months in the winter, eliminated the factor of competition, which is a powerful stimulus to action. Finally, half a century was not enough to entirely remove the habits of inertia and dependence fostered by a régime of serfdom.

The economic results of this position were not satisfactory. Labour was nominally cheap, since the average worker did not depend altogether on his industrial earnings, and was therefore content with a very meagre return for his labour. But in reality it was expensive, since it was inefficient, and required a great deal of supervision. In the Baltic regions, and also in Poland, industrial development was more on the lines followed in Western Europe ;

only reunited when all ties with the village were broken, the whole family went into the town, and became completely dependent on their industrial earnings. This state had been reached by only a very small proportion of the industrial workers, although the break-up of the communal system of landholding was facilitating the process during our period.

labour was more efficient and wages higher.¹ The importance of these regions was considerable: they provided a large proportion of the total industrial output of the country; and they also served as a model for industrial development in other regions.

It was difficult to develop a body of highly-trained workers, owing to their tendency to fluctuate. The male workers usually left the factory in summer, and returned to the fields to help with the harvests: they could not be relied upon to render continuous work during the whole year. Labour disputes were complicated by the fact that the worker could simply stop work and go home to his village for a time. Hence strike funds, to support employees during a period of idleness, were superfluous. Young girls usually only worked in the factories for a few years, until recalled to the village by marriage, illness of parents, or similar reasons. The moral effect of the workers being huddled together in barracks was also unsatisfactory. Particularly bad results followed from the break-up of family life.

The prevalence of domestic or "kustar" industry in Russia was a factor which prevented large-scale industry from becoming assimilated into the general economic structure of the country as quickly as it otherwise might. If the peasant had learned to depend upon the towns for his supplies of clothing, machinery, and so on, instead of making these himself, the antagonism between town and country would have given way before their mutual interdependence. As it was, although the towns depended upon the country for food supplies, the country people were not to any great extent a market for the manufactured products of the towns. Cotton piece-goods were the only articles which the peasants were beginning to buy

¹ Odell, R. M., *op. cit.*, p. 11. "In Poland and St. Petersburg, however, the labour, while more efficient, costs about 10 per cent. more than in the central district."

Drage, G., *op. cit.*

Daily production per workman:

In Esthonia (Kreinholm)	.	.	.	.	402 Rs.
„ Moscow	.	.	.	.	1416 „
„ Vladimir	.	.	.	.	141 „

in serious quantities.¹ In other respects, domestic industry supplied the needs of the peasant very fully.

The numerous branches of activity in which the "kustars" were employed may be conveniently summarized according to the principal raw material utilized in each.²

(a) Industries in wood were the most important, since its products were in wide demand among the peasants themselves.³ A great variety of articles were manufactured, from wooden spoons and other household utensils, up to wheels, carts, sledges, and even artistic and expensive furniture. (b) The textile industries depended mostly on flax and hemp for their raw material, and were mainly carried on in the governments of Yaroslav and Kostroma. Hemp was used in the manufacture of fishing-nets, cords, sails, largely produced in the government of Nizhni-Novgorod. Lace-making was carried on by the female section of the population. (c) Animal products were used for the industries of working up skins, tanning, glove-making, harness-making. (d) Metals and minerals formed the basis of industries which went in for forging, nail-making, the manufacture of locks and keys, samovars, knives, forks, scissors. The main governments engaged in these industries were Nizhni-Novgorod, Tula, Moscow, Vladimir.⁴ (e) In addition, miscellaneous industries were, the manufacture of "ikons" or holy images, particularly in the governments of Vladimir and Kursk, harmonicas in the government of Tula, toys in Moscow and the surrounding district, and also thermometers, barometers, and similar objects.

The earnings in "kustar" industry varied considerably, being sometimes as high as 125-200 roubles per year, sometimes, in the case of women, as low as 15 or 12 roubles per year.

It has been stated that the whole process of industrial

¹ *Vide* later section on "Cotton," p. 250.

² Kovalevsky, V. I., *La Russie à la fin du 19^e siècle*, 1900.

³ Appendix B. Statistics on "kustar" industry in wood-working.

⁴ For a detailed description of "kustar" industry as carried on in the government of Tula, *vide* Cleinow, G., *Beiträge zur Lage der Hausindustrie in Tula* (Staats und sozialwissenschaftliche Forschungen, Leipzig, 1904).

development in Russia was ringed around by violent theoretical controversies. Certain aspects of the labour question were fruitful sources of such controversies. In particular, the Populist interpretation of the persistence of the workers' link with the land, and of the significance of "kustar" industry, was diametrically opposed to that put forward by the Marxian school of economists.¹ The former were strongly in favour of the Russian worker retaining his connection with the village. From the social point of view, they held that it was a very great advantage for the worker to have a refuge to which he could retire in old age or ill health. It gave him some degree of independence and assurance of livelihood, whatever adverse circumstances he might meet with. The Marxians, on the other hand, saw the link between the worker and the land simply as an obstacle to the development of class consciousness, the necessary preliminary to the ultimate victory of the proletariat in the class struggle, which they regarded as inevitable.

The Populists were also enthusiastic partisans of "kustar" industry. Towards the end of the nineteenth century, they brought it under public notice so effectively, that it was on a fair way to becoming the "spoilt child" of Government policy and of public opinion.² They dwelt upon the advantages enjoyed by the industrial worker of rural Russia, working in the patriarchal stronghold of his own home, retaining his personal freedom, and the advantage of residence in the bosom of nature. His lot in their view was infinitely superior to that of the fully-developed proletariat of Western Europe, herded together in unhealthy cities, and subjected to the soulless routine of enormous factories. It was shown that already the number of "kustar" workers far exceeded the number of factory hands, and that Russia could supply her industrial needs from domestic industry and avoid the stage of urban industrial-

¹ Section 1, sub-section 3, "Sociology," deals with the significance of the terms "Populist" and "Marxian" in Russian thought.

² *Review of the Activity of the Government in favour of the Kustary Industry* (R.). Ed. by the Ministry of Agriculture and State Domains, Petrograd, 1902.

ism altogether. It became fashionable among wealthy ladies to use the products of "kustar" industry in their own homes, financial assistance was rendered by the Government and by the Zemstvos in the shape of the advancing of credits, the establishment of banks. Schools were instituted in which the various designs and patterns which had been used in "kustar" work from time immemorial were carefully studied and passed on in their integrity to future workers. Exhibitions of "kustar" work were arranged and a "kustar" museum was erected in Petrograd.

The Marxian economists, on the other hand, blamed the Populists for failing to distinguish between real "kustar" industry where the peasant was economically independent, and home work, which was really a disguised form of capitalistic enterprise where the exploitation of the worker assumed even worse forms than it did in factory and workshop industry. A system of work by which raw material was distributed by capitalistic entrepreneurs to the peasants, to be worked up in their own homes, and then returned to the entrepreneurs, had for long been in vogue. And in many cases "kustar" industry was also losing its independence and passing under the control of capitalistic middlemen. This had gradually taken place, for instance, with the samovar-makers of Tula.¹ The work had been divided into six processes, only one of which was carried out by each "kustar." He obtained his raw material, sheet metal or wood according to the part of the samovar which he had to make, from the peasant manufacturer, completed the process at home, and returned the finished article to the manufacturer from whom he received payment. Since many workers were in the transition stage between independent "kustar" industry and capitalistic employees working in their own homes, statistics referring to "kustar" industry must be handled with great caution.² The so-called "freedom" of home work, the absence of any

¹ *Messenger of Finance*, 1914, No. 30, p. 136, "The Tula Samovar-makers" (R.).

² Plekhanov, G., *Our Controversies*, Geneva, 1885 (R.). Also Il'in, Vladimir (pseudonym for Lenin), *The Development of Capitalism in Russia*, Petrograd, 1899 (R.), Chap. 6, Section VIII, "What is Kustary Industry?"

supervision or publicity, often involved very bad conditions for the worker. Thus excessively long hours might be worked, the employment of women and children was unregulated, the sanitary conditions of the "isba" (peasant's hut) were under no control. Also exploitation of the ignorant peasants, who were in many cases unfit to judge the real value of the raw material or of their finished work, was inevitable, especially where the region was wide and necessitated the growth of a class of middlemen. The function of the latter was to buy the raw material wholesale from the manufacturer and sell it retail to the peasant.¹

The conclusion of the Marxians therefore was that the Populists, by encouraging the so-called "kustar" industry in their anxiety to free the Russian people from the fetters of capitalism, were in reality riveting these fetters more firmly upon them.

INDUSTRIAL LEGISLATION.

The attitude of those in authority to this mass of uncultured, docile workers, as yet incompletely emancipated from agriculture, may be summed up as an admixture of paternalism and absolutism. The only responsibility devolving upon the Russian worker was the actual performance of his work. In all other respects his needs were catered for by outside authorities. On the employer fell the heavy financial responsibility² of housing his workmen in barracks, of providing hospitals, theatres, recreation grounds, evening lectures, for them, day nurseries in which their children might be cared for while the parents worked in the factory, and schools where they could be educated. Hence the low monetary wages paid to the Russian workers were not the real measure of the value they received in return for their labour. The State did its part by enforcing suitable indus-

¹ Il'in, op. cit. *supra*, Chap. 6, Section VII, "Capitalistic Work at Home as Supplementary to Manufacturing Industry."

² Odell, op. cit., makes the statement that for every 100 roubles spent in actual construction work in starting a factory, 45 to 50 roubles were spent on other buildings in connection with these semi-philanthropic activities.

trial legislation, and regulating the various forms of insurance, workmen's compensation and so on.

In the early beginnings of industry, the workers were not considered to have any rights at all. They were serfs, whose labour was at the command of the master in the field or in the factory. It was only in the second last decade of the nineteenth century that industrial legislation as we understand it came into being, by a series of laws passed between 1884 and 1897.¹

These laid it down that for adults the working day was not to exceed 11½ hours: night work must not exceed 10 hours.

For adolescents (aged 15 to 17 years) and women, working hours were the same, but night work was forbidden them, in textile factories, phosphorous match works, and in mines.

Children under 12 years of age might not be employed at all: those from 12 to 15 years might not be employed in unhealthy or exhausting occupations. Night work, i.e. work carried on between the hours of 9 p.m. and 5 a.m., was forbidden to children: an exception was made in the case of glass-works, where six hours' work was permitted, each period of work to be separated from the next by a period of twelve hours' rest. A maximum period of nine hours per day might be worked, in two sections of 4½ hours each.

The contract of hiring was completed by the delivery to the workman of a document setting forth the conditions of the contract, the amount of salary and the intervals at which it was to be paid. In case of breach of contract, both parties were liable to penalties. Fifteen days' notice had to be given on either side before the contract could be terminated. Payment of wages in kind was forbidden, and if provisions of any kind were sold in factory shops, the latter were to be under the supervision of the factory inspectors. The employer's right of inflicting fines in the case of misdemeanour on the part of the workman was limited, and all fines were to form a fund which was to be used for the benefit of the workers.

¹ Kovalevsky, *op. cit.*, p. 554.

The duty of seeing that all these laws were duly observed fell upon the Factory Inspectors. They had very extensive powers, and had to combine the duties of Arbitration Committees and Welfare Supervisors, as well as those of Factory Inspectors proper. For instance, the following matters came under their supervision: the collection of industrial statistics, mediation between employers and employed in case of disagreement, the arrangement of educational facilities for the children of the workers, of medical attention for the workers themselves, and so on.

Many complaints were made as to the unsatisfactory way in which the factory inspectors carried out their duties, one of the reasons alleged being that of venality. The main difficulty, however, lay probably in the impossibility of getting into satisfactory touch with the workers. The latter were quite unorganized, hence the inspectors had no opportunity of conferring with responsible representatives of the men, and really finding out their legitimate grievances and demands. If the inspector wished to ask questions, he could only pick out some man at random from the crowd of workers, and in nine cases out of ten, the particular man chosen would be quite incapable of stating the workmen's case. Consequently, the inspectors were practically forced to rely upon the employers, and work in co-operation with them.

The right of the worker to compensation after accidents was established by the Compensation Act of 2 June, 1903, the regulations of which were mainly adapted from the German legislation on the subject.¹ Up to that time, assistance had been given to the workers out of the funds accumulated from fines, in accordance with the Law of 1886. The legal right to compensation was based on a clause of the Common Law dating from 1851.² The difficulty was that any claim based on this article had to go before the ordinary law courts, and the expense involved was prohibitive for the average worker. After the passage of the Act of 1903, the injured party was represented by the Factory Inspector for the district, who made all necessary arrangements on

¹ *Svod Zakonov*, Vol. XI, Part II, Annex to Article 156¹⁹ (R.).

² Civil Code, Vol. X, Part I of the *Svod Zakonov*, Article 684 (R.).

his behalf.¹ This was ultimately found to be not altogether beneficial to the injured party, since the decision of the Court often awarded damages to a lesser amount than could have been obtained by private arrangement with the employer. This was partly explained by the fact that a voluntary agreement would have been concluded directly after the accident, when the injury inflicted upon the victim would appear greater than at a later date. Further, the Statute of 1903 failed to establish adequate safeguards as to the amount of compensation payable by the employer in the case of liquidation, transfer of property, or the closing down of the establishment.

Activities as regards Health Insurance started very late in Russia, so that not much can be said as to their development. It was only on 23 June, 1912, while the Third Duma was sitting, that the Act organizing a National Health Insurance system received Imperial sanction. "Hospital funds" were to be started in connection with the existing factories, and from these funds members were to receive medical assistance in case of illness. Large concerns employing 200 or more workers were to have separate funds of their own, smaller establishments were to combine and support a joint fund. The financial resources of the funds were to be drawn from the payments of the members, additional payments by the employers, income from any property belonging to the funds, gifts, fines imposed by the administrators of the funds. The amount of the subscription payable was fixed at a general meeting of the members, and was not as a rule to exceed 2 per cent. of the wages paid. Only if there were less than 400 members in the fund could the payment be raised to 3 per cent. In the case of a disagreement between the members of the fund and the employer on a question of management, the dispute was to be submitted to the local Insurance Board. One such was to be formed in each province under the chairmanship of the highest local administrative official. Its members were to be the Public Prosecutor, two members from the Zemstvo,

¹ *The Right (Pravo)*, a weekly legal publication, Petrograd, 1909, No. 35 (R.).

one from the Town Council, two from among the employers, two from the members of the funds, and one member appointed by the Ministry of the Interior.

The Health Insurance movement was specially interesting in that the workers themselves were allowed a good deal of influence in organizing and controlling their hospital funds, this constituting their first legally-recognized attempt at self-government.¹

The Act organizing Accident Insurance also dates from 23 June, 1912. An interesting feature was that the Russian law on this subject placed the whole financial responsibility for insurance of this type on the shoulders of the employer : no contributions were exacted from the workers. In the case of total loss of working capacity, a pension amounting to two-thirds of the yearly salary was payable to the injured party. The pension amounted to the whole of the yearly salary in special cases, e.g. where the accident resulted in lunacy, blindness, or the loss of both arms or legs. If the accident ended fatally, the family of the deceased had a claim to a pension varying according to the closeness of the relationship.²

THE LABOUR MOVEMENT.

The nature of the Labour movement in Russia can only be understood in the light of the paternal and despotic attitude of the Government outlined above. Constant and detailed control was exercised over the workers. Any effort on the part of the latter to combine for mutual protection and assistance, was looked upon with suspicion by a Government always nervously alert for the detection of anti-Government political propaganda. This identification of a properly so-called Labour movement, for the improvement of the economic conditions of the workers, with the Terrorist or Anarchist activities of various anti-

¹ *The Times Russian Supplement*, 27 July, 1914, p. 4, "Workmen's Insurance."

² A widow's pension amounted to one-third of the deceased's yearly salary, payable for life, or until her remarriage; children up to the age of 16, one-sixth, if one of the parents was alive, one-quarter if orphans; brothers and sisters up to the age of 16, one-sixth.

Royalist groups, was a prominent feature of conditions in Russia. Before 1905, any combination on the part of the workers was looked upon as a criminal offence, and punished accordingly. When the workers did meet to discuss affairs in connection with their work, or to study questions of economic or political interest, they had to do so in secret,¹ in an atmosphere of stealth and intrigue, which formed a soil on which the seeds of revolutionary propaganda took rapid root. These seeds were sown by professional agitators, belonging to the different Socialist groups, who made it their business to try and establish some connection between the workers in different trades, to foment disturbances, organize and encourage strikes, and form secret circles for the study of economic questions.²

The admission of the principle of legal trade unionism was a concession granted by the Government as a result of the revolutionary movement of 1905.³ The regulations governing such bodies show that their activities were to be strictly confined to the economic sphere.⁴ They were promulgated on 4 March, 1906, almost on the eve of the convocation of the first Duma, and granted to both parties engaged in industry, the workers and the entrepreneurs alike, the right of forming unions.

Some of the important clauses of the Statute were as follows: Clause one states that the purpose of these unions is to be confined to the study and adjustment of the economic interests of the workers, the improvement of the conditions of labour, etc.; the second clause enumerates, among other specific activities of these unions, (1) the organization of arbitration machinery in labour disputes, (2) inquiry into

¹ *Vide Osvobozhdeniye (Liberation)*, a monthly paper published in Stuttgart, Nos. 4, 5, 6, August–September, 1902 (R.).

² Mr. J. Martov (Zedeabaum) was an agitator of this description, and details of his activities among the workers of Petrograd, and among the Jewish workers of Vilna, is to be found in his book, *Notes of a Social Democrat*, Berlin, 1922 (R.).

³ A "union" movement began among the workers as early as the last decade of the nineteenth century. But the societies formed had to receive Government sanction, and their operations were strictly confined to "Friendly Society" activities. *Vide Encyclopædic Dictionary*, Vol. 61, p. 115 *et seq.* (R.).

⁴ *Svod Zakonov*, Vol. XI, Part II. Rules annexed to Clause XI (Note 5), p. 2543 (R.).

questions affecting wages, (3) the carrying on of Friendly Society activities, (4) the conduct of educational work, the establishment of libraries, schools, etc., (5) serving as Labour Exchanges; in the fifth clause, any amalgamation of unions was expressly forbidden; clause 7 stated that members of a trade union must belong to identical or similar work; according to clause 9, trade unions had to be registered.

It was, therefore, no longer a crime for the workers to associate, but the unions found themselves seriously hampered by Government suspicion and interference, particularly in the years of repression following the revolutionary outbreak of 1905-6. Complaints were made in the Duma from time to time by members of the Opposition groups, as to the evil effects of this repressive and suspicious policy.

The chief weapon of the trade unions in enforcing their demands, i.e., the right to strike, was categorically refused in Russia. A strike, by which was understood an intentional cessation of work before the time of the contract expired, with a view to forcing the employer to grant an increase of wages or some other concession, was looked upon as a "breach of the social order." Police measures were immediately taken to force the men to resume work, or to persuade the employer to grant concessions. It was not necessary to prove that the cessation of work took place in an industry of national importance, such as railways, telegraph or telephone establishments, or that it was accompanied by actual violence. In this respect, the law of Russia was behind the laws in other countries of Western Europe, which only punished the elements of force and violence when they appeared in strikes.²

¹ *Proceedings of the Duma* (R.), 21 April, 1914, Tulyakov, on the "outlaw" position of the Labour Press. 26 April, 1914, Titov, on the impoverishment of the worker's mental life, owing to the denial to him of the educative influence of self-help. Certain evidence would seem to show that the suspicious attitude of the Government was not always unjustified. For instance, the arrest and destruction of K. Dimitriev's book, *From the Life of Trade Unions in Russia* (R.), had been ordered, and, after an appeal, carried out. In it, the author urged the formation of unions, under cover of the law, to be used later for frankly revolutionary purposes. *Pravo*, Supplement No. 28, 30 September, 1908.

² *Osvobozhdeniye*, No. 5, August, 1902 (R.). The laws referred to above date as follows: Austria, 1870; England, 1875; Italy, 1889; Belgium, 1892; Germany, 1899.

In spite of these prohibitions, strikes did take place, and the years before the war saw a rising tide of industrial disturbances, particularly in the Petrograd district.¹ The most marked feature of the movement was the number of repeated strikes, and the fact that the great majority took the form of short political demonstrations, lasting for a maximum period of two days, rather than the more prolonged industrial conflicts which occur in Britain.

INDUSTRIAL COMBINATIONS.

Although industry in Russia grew up behind the shelter of a high tariff wall, which in other countries has been found to be a potent factor in encouraging the growth of trusts and combines among industrialists, the movement developed only very slowly in Russia. The country was still predominantly agricultural. The industry that did exist had grown up under a system of Government protection and tutelage from which it could not readily emancipate itself. The fear of political propaganda which actuated the State in repressing movements towards unification and co-ordinated action among the workers, was even stronger where possible combinations among industrial leaders was concerned. On the side of industry, the comparatively weak growth of the concentration of capital—although this phenomenon was making itself increasingly apparent—the persistence of small-scale home industry, and the lack of custom on the part of the industrialists to confer and act in common, acted as deterrent forces in the growth of combines.²

Such combinations as did exist were, therefore, either loose arrangements for fixing a minimum selling price, or protective organizations formed to combat unduly lowered prices or other adverse circumstances. In them the Govern-

¹ Appendix C for statistics on strikes.

² On the whole question of Combinations, vide Yanzhul, I. I., *Trade Syndicates and Unions for the Regulation of Production, particularly in the United States of North America*, Petrograd, 1895 (R.). Raffalovich, A., *Trusts, Cartels, et Syndicats*, Paris, 1903, p. 511, "Combinations and Cartels in Russia." Tsiperovich, G., *Syndicates and Trusts in Russia*, Moscow, 1919 (R.).

ment and the industrialists combined against the foreign producer or the domestic speculator.

The sugar "normirovka," for example, was formed in 1887, at the suggestion of the Government. Overproduction in the sugar industry had led to an undue lowering of price on the home market. Government assistance in the form of export bounties on sugar was not sufficient to relieve the resulting pressure. The sugar manufacturers were therefore encouraged to combine and form an agreement whereby only a certain amount of sugar was to be released on the home market, and the surplus exported abroad. This arrangement continued in force until the Government itself took over the regulation of the sugar industry in 1895.

The Petroleum Syndicate, formed in 1892 in the Baku oil industry, also relied upon Government assistance, to enable the Russian manufacturers to meet American competition. The Baku manufacturers entrusted the entire sale of their product to a Selling Syndicate composed of five firms, headed by Nobel Brothers. Government help was rendered by the lowering of freights on the Trans-Caucasian railway.

Only in the twentieth century did Combinations begin to be formed more directly on West European and American models. The chief stimulus was given by the crisis in the metallurgical and other industries about the year 1900.¹ A syndicate formed in 1902 among the metallurgical works, and called "*Prodamet*," soon embraced in its scope 80 per cent. of the entire production of the metallurgical works in Russia. It was formed as a joint stock company, and its articles of association were confirmed according to established usage. The shares were distributed among the works participating in the arrangement according to their productiveness. Sales were all conducted through the Syndicate, and the works participating were guaranteed a certain share of all orders. A coal syndicate, called "*Produgol*," was formed on similar lines.

¹ *The Times Russian Supplement*, 27 April, 1914, p. 4. "Trusts and Syndicates. Present relations with the Government."

The Tobacco Trust formed in 1914 is interesting as showing how international influences were beginning to penetrate into Russia.¹ The tobacco-manufacturing business was concentrated in the hands of a few big firms who had gradually driven out their weaker competitors. But instead of combining they maintained an inveterate rivalry among themselves, which greatly lowered the price of tobacco, to the benefit of the consumers, but not of the manufacturers. Finally, an English capitalist group, inspired by the American Tobacco Trust, and its English ally, the Imperial Tobacco Company, intervened and began buying up the Russian Tobacco companies. Towards the end of 1913, it had acquired most of the important establishments. A company was formed in London, with a capital of £5 million sterling, and the Russian Tobacco Trust entered into existence on this basis.

The growth of Combinations in Russia before the war had not, therefore, been sufficiently great to arouse the hostility or suspicion of the Government. The latter, being very anxious to secure the successful development of industry, was even inclined to encourage the growth of organizations directed towards the improvement or protection of any branch of industrial activity. The general attitude of those in authority seems to have been to countenance the development of any combination which did not display any anti-social tendency. A strong body of opinion held that Combinations were the inevitable outcome of modern economic conditions, and that the Government would be more successful in formulating a system of control for openly existing bodies, than by driving them underground by repressive legislation. A drawback to the normal development of Combinations was the lack of modern legislation on the subject. Only an antiquated Statute, punishing any agreement between merchants which tended to raise the price of articles of prime necessity, could be applied to them.² A

¹ *Ibid.*, 16 February, 1914, p. 8, "The Tobacco Trust. Policy and Progress in Russia."

² Legislation relative to monopoly. Article 913 of the Penal Code punished any agreement tending to raise the price of *food-stuffs*. Article 1180 extended the punishment to agreements tending to raise the prices of articles of *prime necessity*.

Statute was in course of preparation which would control the action of Combinations, so as to safeguard consumers, while allowing their free development as purely economic phenomena.

CHAPTER XI.

MANUFACTURES.

MANUFACTURING industry in Russia had not yet succeeded in satisfying the varied and ever-increasing demands of the home market, and recourse still had to be had to foreign imports. The existing manufactures may be divided into four main groups, those dealing with textiles, metals, food products, and miscellaneous manufactures.¹

(1) The textile group comprised factories working up cotton, wool, silk, flax, hemp, jute, and fibrous materials. These were concentrated in three regions: Moscow and the neighbouring governments of Vladimir, Yaroslav, Kostroma, the Baltic provinces, round Petrograd and Riga, and in the kingdom of Poland, in the neighbourhood of Lodz and Warsaw.

(2) Under metal-working enterprises were included those engaged in the manufacture of all kinds of tools and plant, metallurgical industries, railway workshops, the production of navy and army requisites. The manufacture of various small articles, such as knives, nails, locks, etc., was largely carried on in "kustar" industry. The presence of raw material and fuel dictated the localization of the metal-working industry in the three regions of Ekaterinoslav and the neighbouring governments, the kingdom of Poland, and the Urals.

(3) The manufacture of food products was a very important branch, which included sugar refineries, flour mills, tobacco factories, distilleries, breweries, confectionery works, etc., etc. These industries were fairly well scattered over the

¹ Raffalovich, A., *Russia, etc.*, p. 105 *et seq.*, "Factories and Workshops," also *The Industries of Russia, Manufactures and Trade*, ed. by J. M. Crawford (English edition), Vols. I and II.

whole of Russia, except for the sugar industry, which was concentrated in Kiev and the surrounding governments, and flour-milling, mostly carried on in the South of Russia and the Volga region.

(4) Miscellaneous manufactures included the production and refining of naphtha, mostly localized in the Caucasus. Chemical works were also of importance, although hampered by the necessity of importing certain products, such as Chilian saltpetre, aniline dyes, sulphur, and pyrites. An important branch was the manufacture of rubber goods, particularly goloshes, which are extensively worn in Russia in winter. Paper and wood-working mills were of considerable importance, especially in those regions of the country which were rich in timber. Works for the manufacture of glass wares, bricks, pottery, cement, leather goods, were also increasing in numbers and importance.

I. SUGAR.

During the eighteenth century, the sugar industry was concerned with the refining of cane sugar imported from abroad.¹ The first sugar-beet factory was established in 1802 in the government of Tula, but it was only after 1880 that Russia was able to satisfy her home demand, and even to begin exporting sugar. The industry always enjoyed special Government protection and assistance, at first in protective customs duties which eliminated the competition of foreign sugar on the home market, next in bounties on export when a large supply of sugar on the internal market had resulted in a lowering of prices and consequent loss to the manufacturers. The Government assisted the latter in the formation of the sugar "normirovka,"² and finally in 1895 took the regulation of the industry into its own hands. The Government regulated each year, in accordance with the amount produced, (1) the quantity of sugar which the factories were authorized to put on the home market, and the maximum price at which it might be sold, (2) the amount of the annual production which was to be put

¹ Kovalevsky, *op. cit.*, p. 365 *et seq.*

² *Vide* section on "Combinations," p. 224.

aside as a reserve, and (3) the amount of surplus which might be exported abroad or kept as a special reserve. It has been held that this regulation resulted in the benefiting of the sugar manufacturers at the expense of the general population.¹ Sugar prices were high in Russia, as compared with the prices ruling in Western Europe. Consequently the consumption of sugar per head of population was very low, being only 4.7 kilograms, as compared with 30 kilograms in America and England.

Russia adhered to the Brussels Convention by the Act of 6 (19) December, 1907, and prolonged her adherence by the protocol of 4 (17) March, 1912. The Convention was the outcome of the International Conference on the sugar question, held at Brussels in 1901-2, as a result of which the contracting parties bound themselves to suppress all direct or indirect bounties on the export of sugar.²

Out of the 292 refineries in the Empire in 1913, 146 were situated in the south-west, particularly in Kiev.³ The central provinces accounted for 76, the eastern, Voronezh, Tambov, etc., for 17, and the western district of Poland for 53. In 1913-14 there were 677,768 dessiatines under beet.⁴

Russia occupied the first place among the countries of Western Europe as regards the area under beet cultivation; she was second only to Germany in the number of refineries she possessed.⁵ But in methods of cultivation and dealing with the crop, she was much behind the rest of Europe.

¹ P.P., No. 555, Miscellaneous Series. *Report on the Mineral and Metallurgical Industries of Russia*, Mr. Cooke, British Commercial Agent in Russia, p. 14. Published 1901.

For details on the whole sugar question, *vide* Preyer, W. D., "Die russische Zuckerindustrie" in *Staats und Sozialwissenschaftliche Forschungen*, Leipzig, 1909, Heft. 135.

² "Conférence internationale sur le régime des sucres. Bruxelles, 1901-2. Procès-Verbaux des Séances tenues du 16 Dec. 1901 au 5 Mars 1902." Brussels, 1902. The Powers participating in and signing the Convention were Germany, Austria-Hungary, Spain, France, Britain, Italy, Holland, Sweden, Belgium.

In 1911-2, Russia was authorized to export on the conventional market 12 million poods of sugar, and a supplementary export of 3 million poods.

³ Appendix A. Geographical distribution of the refineries.

⁴ *Messenger of Finance*, No. 3, 1914 (R.), p. 113, "Statistics on the Sugar Industry in 1913-14."

⁵ Appendix B. Comparative figures as to the number of refineries, area under beet, etc., in the different countries of Europe.

Consequently her figures for the yield of beet per dessiatine, and the amount of sugar extracted from it, compared very unfavourably with the corresponding figures for Germany, Austria-Hungary, France, etc.

The disastrous season of 1912-13 serves to illustrate the difficulties with which the sugar industry in Russia was confronted.¹ The harvesting of the beet crop was seriously hampered by heavy rains beginning in August and followed by unusually early frosts and snow in October. Consequently there was an entire loss of crop from 91,682 dessiatines, out of a total extent of 682,946 dessiatines of beet plantations. The climatic conditions had reduced the roads to a very bad state; there was difficulty in transporting the part of the beet crop that was successfully harvested into the factories. The final result was a serious shortage of sugar, and a very considerable rise in its price, in spite of successive issues from the reserve stocks.

Russia's export trade in sugar varied considerably from year to year, since it depended on the beet harvest, which was subject to climatic uncertainties. The following figures show the decline caused by the bad harvest of 1912-13:

Year.	Amount exported (in poods).
1911-12	31,652,787
1912-13	10,278,296

The countries to which Russia's exports were mainly directed were Italy, Finland, Germany, Great Britain, Turkey. Persia was her most important market for loaf sugar. In spite of Russia's advantage of geographical proximity she did not make much progress in importing sugar into Persia as compared with her German and Belgian rivals.² Her main difficulties were the absence of good roads in Persia, and the lack of credit facilities.

The cultivation of beet sugar was a progressive movement as regards Russian agriculture in general. It brought with

¹ *Messenger of Finance*, No. 15, Year 1914 (R.), p. 67, "The Sugar Industry in Russia in the period 1912-13."

² Appendix C. Figures for import of sugar into Persia.

it such improvements as rotation of crops and careful manuring, while the utilization of the refuse for the production of winter feed for cattle was an important advance. All these factors were of great significance in a country where the ignorance of the peasantry and the resulting primitive methods of cultivation were serious drawbacks to agricultural progress.

2. SPIRITS.

The sale of alcohol had always been subject to some sort of State regulation in Russia, and illustrates very clearly the activity of the State in this sphere of industrial life. At the end of the sixteenth century an Act was passed under the authority of Boris Godunov, reserving the right of trading in alcoholic beverages to the Government.¹ The Tsar Alexis Mikhailovich introduced a Government monopoly of the sale of spirits, beer, and hydromel, by the Statute of 1649. The "farming out" ("otkup") system replaced this monopoly, and was in vogue from 1795-1863, except for a short interval from 1819-27, during which the Government monopoly was temporarily reintroduced. Under this system the Government granted to private persons the exclusive right of selling spirits in certain provinces. The results proved disadvantageous in the extreme, both to the people, to whom spirits of bad quality and high price were supplied, and to the Government, whose revenues were seriously reduced. Intemperance was encouraged, since it was to the advantage of the holders of concessions to push the sale of alcohol in their respective districts. An excise system was substituted for this in 1863, and was in force until the institution of the State Monopoly in 1894. The net result of the excise system was the transfer of distilling from the realm of small-scale rural economy to that of large-scale industrial enterprise. An advantage was given by it to factories which could produce an excess over the normal amount distilled and subjected to the tax. Hence large

¹ *Journal of the Royal Statistical Society*, Vol. LXIV, Part I, 30 March, 1901. "The State monopoly of Spirits in Russia, and its influence on the prosperity of the population." Alexis Raffalovich.

and well-equipped factories were in a more favourable position than small rural enterprises, often employing primitive methods of manufacture. Under this system, no progress was made in the struggle against intemperance, neither was the fiscal side satisfactory to the Government. Hence the State monopoly of the manufacture and sale of spirits was introduced on 20 December, 1894, and the trade was brought entirely and directly under the control of the Government.¹ The crude spirit was bought on contract from private manufacturers, and taken to Government refineries to be rectified. Its sale to the public was carried out in Government shops, by men and women appointed and paid by the Government. They received no commission on the sales effected, hence any personal interest in the amount sold was eliminated. The system allowed of some exceptions. For instance, rectification was occasionally carried on in private refineries, and vodka was sometimes sold on commission in private establishments outside Government shops. The number of the latter to be set up in each town or village was decided by the Excise Department, subject to the veto of the local authorities, town councils or zemstvos as the case might be. The monopoly was at first instituted in four governments only, those of Perm, Ufa, Orenburg, and Samara, but the period 1904-14 saw its gradual extension over the whole of the Empire.

There are four aspects in which Count Witte's "experiment in State Socialism" has to be considered before definite conclusions can be drawn as to its shortcomings and real value.

(1) There is first of all the purely fiscal aspect, how the State revenue was affected by the diversion of the profits from the trade in drink from private hands to the coffers of the State Treasury. In this respect, the monopoly can at once lay claim to having been a complete success. During the decade 1904-13, when the monopoly was being extended over the whole country, it yielded a net revenue of 5.329 million roubles to the State Treasury. The annual average

¹ Simpson, Prof. J. Y., *Some Notes on the State Sale Monopoly and subsequent Prohibition of Vodka in Russia*, London, 1918.

return was 500 million roubles, when the total State Budget amounted to 2 milliards of roubles.¹

(2) There is also the industrial aspect—how the monopoly affected the distilling industry. Its results were favourable to small-scale distilling as opposed to large-scale enterprise. This was in accordance with the policy of the Government, which looked upon distilling as a useful part of the village economy, and wished to prevent it becoming a purely urban industry. The interests of large landed proprietors with distilleries on their domains was also an important factor.²

(3) From the social-hygienic point of view the monopoly was also a success, in that it replaced adulterated and harmful liquor by spirits of known purity, thus greatly benefiting the health of the population. But it did not succeed in modifying the general type of intemperance. By insisting on the sale of vodka in very small quantities, and at certain prescribed hours and places, the Government had hoped to replace sporadic bouts of drinking in excessive quantities by a moderate and regular consumption of spirits at home. The endeavour to enforce the system, however, simply encouraged an illicit trade in spirits,³ and the effect of drinking at home was merely to pass on the vice to the peasant's wife, and even to his children. It remained his custom to go without spirits altogether for several months at a time, and then to indulge in perhaps days of continual drinking, usually on the occasion of some social event, such as a wedding, a christening, or a funeral.

(4) There was lastly the moral aspect, the effect of the monopoly in the struggle against intemperance, a vice which was making alarming headway among the people, and was becoming a serious social problem. In this respect, the monopoly must also be admitted to have been a failure.

¹ *Ibid.*, Section II. Also *vide* Appendix A for financial results of the State Spirits Monopoly.

² The Law of 4 July, 1890, was also part of the same Government policy of encouraging small rural distilleries. They were allowed to produce a greater quantity of alcohol free of duty than were industrial distilleries.

³ Private traders hoarded up supplies of spirits, which they afterwards made the object of an active retail trade. This was facilitated by the fact that the number of Government shops was not great enough to satisfy the demand of the people for drink.

The consumption of spirits, not only absolutely, but per head of the population, increased steadily during the decade preceding the outbreak of the war. The *per capita* consumption, which was 0.54 vedros in 1904, had increased to 0.66 vedros in 1913.¹ The total consumption went up from 75 million vedros of spirits 40 degrees strong in 1905 to 104 million vedros in 1913.² The result was that drunkenness, with its accompanying evils of crime, disease, and lowered efficiency of the population, was becoming a problem of increasing seriousness.³

The State's failure to cope successfully with this problem has been ascribed to the incompatibility existing between the two motives underlying the monopoly, and not to any defect in the system itself. These motives were, the fiscal interests of the Treasury on the one hand, and the moral welfare of the people on the other. If the monopoly had been conducted mainly with a view to the latter, with the fiscal aspect kept in a subsidiary position, some progress might have been made. But the difficulties of the financial situation, aggravated by the disasters of the Russo-Japanese War, made the State primarily anxious to secure an increasing revenue, and rendered its efforts towards temperance reform only half-hearted, since these efforts would necessarily decrease the Treasury receipts. Theoretically the encouragement of temperance went hand in hand with the establishment of the monopoly, since Temperance Committees were set up in every government in which the monopoly was enforced. The duty of these Committees was to combat drunkenness by spreading a knowledge of its evils among the people by means of pamphlets, books, lectures, etc. They also aimed at providing the people with other and more innocuous diversions for their leisure hours in the shape of reading-rooms, tea-shops, "People's Palaces,"

¹ *Vide* Appendix B, statistics on the increase of consumption of spirits per head.

² *Vide* Appendix C, statistics of total consumption in districts.

³ Prof. Simpson, *op. cit.*, Section XI, p. 58, gives statistics showing the influence of prohibition in increasing the productivity of labour. The increase reached 20-30 per cent. two years after the institution of the measure, showing to what effect drink had previously been a drag on the efficiency of labour.

Sunday schools, handicraft schools, and so on. But the activities of these Committees were hopelessly limited by the insufficiency of the funds granted to them, and what they did accomplish was vitiated by an atmosphere of undue "officialism."

Reforms were projected, in the shape of greatly extending the activities of these Committees, so as to render them really effective, and sinking the fiscal interests of the Treasury in favour of those of public morality. These, however, were interrupted by the outbreak of the war, immediately after which the complete prohibition of the sale of vodka was carried into effect.¹

3. COTTON.

Before the war, Russia had attained the fourth place among the cotton-manufacturing countries of the world, ranking after Great Britain, America, and Germany.² The industry had been established in the country as early as 1700. It received a stimulus in the early part of the nineteenth century, particularly in the dyeing and printing branches, by the skill of a number of French prisoners left in Russia after the Napoleonic wars. The development of the industry on modern lines, however, dates from 1840 when the export of cotton machinery from England to Russia was first permitted. The pioneer was a German, Ludwig Knoop, who came to Moscow in 1839 as the representative of an English firm of yarn merchants. Later he built a factory and equipped it with English machinery which he was able to secure on favourable terms, owing to his connections in England. His factory proved to be the first of many, and the industry made rapid progress.

¹ *Vide* Prof. Simpson, *op. cit.*, Section VI *et seq.*, for information on the Prohibition period.

The active temperance campaign conducted in the third Duma, which sat from 1907-12, should be noted. The peasant Chalyshov, member for Samara, was prominent in its activities. Its aim was the passing of a bill for local option on the immediate abolition of all kinds of alcoholic drink in any district, town, or village, where a resolution to that effect should have been passed.

² Odell, R. M., *Cotton Goods in Russia*, U.S. Bureau of Manufactures, Washington, 1912. Also *v. Drage, G., Russian Affairs*, p. 158; and Schulze-Gävernitz, *Volkswirtschaftliche Studien aus Russland*.

The presence of English managers, foremen, machinery, and methods, was at the outset, and continued to be, a marked feature of the cotton industry in Russia. Hence the factories had the advantage of being directed by men who had in many cases been trained in Lancashire mills, who were efficient, progressive, and quick to adopt modern methods of management. This element of a highly trained and alert directing personnel was, as we have seen, a sorely felt want in other branches of industry. The high tariff on foreign manufactures, amounting to 40-50 per cent. *ad valorem*, effectively eliminated foreign competition, and secured the home market to the home manufacturer. In addition, labour was cheap and abundant: the supply of home-grown cotton was becoming steadily greater; and the demand for cotton goods within the country was also increasing. In 1890, the *per capita* consumption of cotton cloth in Russia was 2·31 pounds; by 1910 it had risen to 4·56 pounds. Under the favourable circumstances prevailing, the industry made rapid progress.¹

Cotton was universally worn by the Russian peasants, both for outer and under garments, therefore they might be expected to provide a market of increasing importance for cotton goods as their material conditions improved. An important factor was that they wore cotton all the year round, the heated temperature of the houses in winter rendering warmer clothing unnecessary. Woollen clothing was comparatively little worn.

There were three main cotton manufacturing districts in Russia, the Central or Moscow district, the Baltic or Petrograd district, and the Western or Polish district. Of these the first was the most important.² Moscow had the advantage of being an important railway and industrial centre, and of having a favourable geographical situation as the meeting-place between East and West. The cotton industry there had a varied choice as regards fuel supplies: wood and peat were found in the neighbourhood, and naphtha

¹ Appendix A. Statistics showing the progress in the cotton industry from 1905-11.

² Appendix B. Production of cotton in the different districts.

from Baku could be easily transported up the Volga. The Baltic region enjoyed the advantage of being situated on the seaboard, whence raw cotton from America and machinery from England could be imported direct. The Polish district was favourably situated as regards proximity to Western Europe, through which it could obtain supplies of machinery, raw cotton and fuel, but was not so well situated as was Moscow for marketing its output.

The difference in the annual average earnings of the operatives in these three districts was considerable,¹ and reflected not only the difference in the efficiency of their work, but also in the system of working hours prevailing. The average earnings were lowest of all in the Moscow district, where labour was abundant and not highly skilled. In this region the two-shift system was employed, there being two sets of workers, each of whom worked nine hours per day. In the Baltic and Polish regions, labour was more efficient and less plentiful, hence the average day was one of eleven hours.

A feature of the industry in all three regions was the prevalence of large mills. A large amount of capital was required to build, equip and operate a cotton factory in Russia, hence small mills were unprofitable. It was not only the mill itself which had to be considered, but the large number of other buildings which the employer found himself practically forced to erect for the benefit of his workpeople—schools, churches, hospitals and so on.

¹ Average earnings according to the report of the Inspector of Labour for 1910:

Districts.							Average earnings.
Central:							\$
Moscow	.	.	.	.	.	.	118·96
Vladimir	.	.	.	.	.	.	98·80
Yaroslav	.	.	.	.	.	.	100·45
Kostroma	.	.	.	.	.	.	98·80
Average	.	.	.	.	.	.	104·22
Baltic:							
Petrograd	.	.	.	.	.	.	147·29
Esthonia	.	.	.	.	.	.	140·59
Average	.	.	.	.	.	.	143·94
Western	.	.	.	.	.	.	150·38

The Russian spinner was fortunate in having a large selection of raw cotton from which to draw his supplies. In foreign varieties he had at his disposal American, Egyptian, Persian and East Indian cottons, while the supply from Russian sources was becoming increasingly important.¹ In 1890, Russia relied on foreign sources for 75.1 per cent. of her cotton supplies; by 1910, this proportion had been lowered to 49.1 per cent. It was the ambition of the Government to lower this percentage still further, until Russian mills were supplied exclusively from home sources.² The construction of the Orenburg-Tashkent line was an important part of the Government's policy in this direction since it opened up the supplies of raw cotton from Turkestan to the home manufacturers.

There were two areas of cotton cultivation, in Turkestan and in Transcaucasia.

Turkestan.—Native cotton had been grown in Asia from the earliest times. The stimulus to extend its cultivation, and to introduce foreign varieties, was given by the cotton famine caused by the American Civil War. The development of cotton growing was fostered by a heavy duty of nearly 3*d.* per pound on imported cotton, and by the Government's schemes for irrigation and other improvements. Only 1½ million acres were under cultivation in the Turkestan area, with its different districts of Ferghana, Syr-Daria, Samarkand, the Transcaspien district, and the tributary states of Khiva and Bokhara. It was estimated, however, that this area would be doubled when the Govern-

¹ Odell, *op. cit.* Statistics from the Department of Commerce and Industry, from the official returns from the mills.

Varieties.	1905.	Lbs.	1910.
American	281,590,613		285,052,892
Russian	246,585,310		405,754,433
Egyptian	38,032,108		46,701,018
Persian	26,648,695		44,038,029
East Indian	9,388,022		15,758,516
Total	602,244,748		797,304,888

² Todd, J. A., *The World's Cotton Crops*, London, 1915, Chap. VI, pp. 64-77, "Russia."

ment's extensive engineering plans were carried out. The difficulty lay largely in securing a suitable labour supply. Immigration was complicated by the fact that Turkestan had been in Russia's hands for only half a century, and the Russians were still looked on as a conquering alien race, occupying a position similar to that of the British in Egypt. If these difficulties were overcome, and immigration stimulated, there remained the problem of establishing better communication with the wheat lands of Russia, so as to secure food supplies for the increased population.

Transcaucasia.—The district of Transcaucasia was divided into two regions: one in the valley of the Kura, the other in the province of Kutais on the river Rion. Before the war, 323,000 acres were under cultivation, which, it was calculated, could be increased to 1 million acres if irrigation were practised on an adequate scale.

(a) Imports of cotton goods into Russia were very insignificant compared with the extent of the market.¹ This was explained by the fact that the customs rates on cotton goods were high enough to secure the home market to the native manufacturer. Germany was the most considerable importer,² followed by England, China, Finland, and other countries. The comparatively large import from Finland was due to the fact that cotton goods from that country were admitted at a lower rate of duty than that imposed on imports from other countries. Goods from China were admitted duty-free along certain parts of the frontier, which accounted for their importance.

(b) Exports of cotton goods were mainly directed to Eastern markets, or to the countries of Western Europe which were in immediate proximity to Russia.³ The Persian market was of great importance to Russia, that country taking a considerable part of her cotton exports. Britain was, however, a formidable rival, and only in the years immediately preceding the war was Russia able to definitely

¹ Appendix C. Import of cotton goods into Russia, 1905-9.

² Appendix D. Import of cotton goods into Russia in 1909 according to the importing countries.

³ Appendix E. Russia's exports of cotton goods in 1909 according to countries of destination.

establish her ascendancy.¹ In the Chinese market, Russia found herself seriously hampered by the necessity of competing with the up-to-date methods and progressive organization of such competitors as England, Japan, America.² The opening of the Trans-Siberian railway did much to stimulate the sale of Russia's cotton goods in China.

4. IRON.

The advance of metal-working industry is one of the best indications of economic progress within any country, since its products are largely utilized, not in satisfying direct needs, but in stimulating further production, as in the development of transport, in building operations, in manufacturing machinery for production.³ The iron industry in Russia had its beginnings in the region of Tula as early as the second half of the seventeenth century.⁴ Later it became established in the Urals, where it continued to be the main source of iron and pig-iron for the whole of Russia up to the first half of the nineteenth century. The mining region of the South, however, rapidly rose to a predominant position during the latter part of the nineteenth century, and the first decade of the twentieth. Its natural advantages over the Ural region were numerous. The presence of excellent

¹ *Messenger of Finance*, No. 6, 1914 (R.), p. 256, "Russian cotton manufactures on the Persian market," gives the following statistics: Position of Russia and England as regards Cotton Import into Persia.

Years.	Russia. 1,000 Roubles.	England.
1906-07	10,189	13,999
1907-08	8,770	16,565
1908-09	6,721	15,432
1909-10	8,524	15,432
1910-11	9,482	13,860
1911-12	11,091	14,714
1912-13	16,180	14,238

² *Messenger of Finance* (R.), No. 21, 1914, p. 384, "Russian Manufactures on the Chinese Market."

³ *National and State Economy*, ed. by the Peoples' Commissariat for Finance, Moscow, 1923, Chap. IV. Home production of metal-working industry utilized as follows:

	1900.	1908. In Million Roubles.	1912.
Machine-building	160	245	302
Agricultural machinery	6	25	40-45
Industrial machinery	32	49	90
Transport	—	60	70

⁴ Raffalovich, A., *Russia*, etc., p. 192 *et seq.*

coking coal rendered the metal-working industry there quite independent of wood fuel. It was served by a good railway net, which gave it easy access to the main parts of the country. The presence of a large amount of foreign capital, and generous Government assistance in the shape of extensive orders for railway construction, favoured the development of large and well-equipped enterprises.¹ The iron industry in the Ural district, on the other hand, possessed little or no railway communication with the rest of Russia, depended entirely on wood fuel, its factories were of old-fashioned construction, and were not equipped with up-to-date machinery. On the other hand, it was held that the industry in the Urals was on a much more secure basis than was the industry in the southern region, the development of which was of a forced and artificial character, largely stimulated by foreign enterprise and undue Government encouragement. This opinion seemed to be justified by the commercial crisis at the beginning of the twentieth century, which was particularly keenly felt in the iron industry.² A sudden drop in Government orders for railway construction involved many firms in embarrassments from which they found it impossible to recover. The depression consequent upon this severe crisis continued up to 1908, after which the development of the iron industry proceeded at a rapidly increasing rate.³ In 1912-13 it was estimated that the metal-working industry was responsible for about 20 per cent. of the total output of manufacturing industry in Russia.⁴

The most striking feature in the development of the metal-working industry in Russia was the very great rapidity of its growth. This was largely due to the development of

¹ *The Russian Economist*, op. cit., Vol. I, No. 1, p. 132, "Foreign Capital in the Donetz Basin." Appendix A, statistics of output of pig-iron in the Donetz basin.

Foreign capital in iron-mining = 85.65 per cent.
" " metallurgy = 90 per cent.

² Accounts and Papers, No. 555, Misc. Series. *Report on the Mineral and Metallurgical Industries of Russia*. Mr. Cooke, British Commercial Agent in Russia.

³ *National and State Economy*, op. cit., Chap. IV A, p. 217, deals with metallurgy.

⁴ Appendix B for statistics of production in all iron-producing regions.

the southern region, and was closely connected with the progress of railway construction. Since the latter was almost entirely under State control, metallurgy was of necessity very dependent on Government orders for the marketing of its products. It was also closely connected with the development of industry in general, since a rapid industrial growth also implied an increased sale of its products. The state of the harvests, which affected industrial prosperity, and through it the demand for metal goods, particularly agricultural machinery, was of fundamental importance in the metal-working industry. It was only during the few years preceding the outbreak of the war that visible progress was made in the tendency of the industry to emancipate itself from dependence on these two factors of Government orders and the state of the harvests, and establish itself upon the secure foundation of the general needs of the country.

The increase in the demand for iron was very considerable during our period, but the *per capita* consumption still remained comparatively low. For example, in 1912 it was only 28 kilograms as compared with 156 kilograms in Germany,¹ and an increase was only to be expected with the growth of the railway system. The growth of the home output did not keep pace with the growth in demand, and imports of iron goods were increasing rapidly, undeterred by the high Customs duties. Nevertheless home production still succeeded in satisfying over 90 per cent. of the demands of the internal market before the war.²

¹ Raffalovich, A., *Russia*, etc., p. 198.

² *National and State Economy*, Chap. IV, gives the following figures :

						1910-13.
Internal production	.	.	.	.	.	92 per cent.
Import	.	.	.	.	.	6 „
Reserves	.	.	.	.	.	2 „
						<hr/>
						100 ,

(b) EXTRACTIVE INDUSTRY.

CHAPTER XII.

MINING AND METALLURGY.

RUSSIA has the distinction of containing within her borders supplies of every known mineral. In the case of some minerals, of considerable importance in the world market, such as platinum, she held the position of a monopolist.¹

As regards European Russia, the chief deposits of mineral wealth are found in the Urals and the Caucasus.² In the Urals, besides supplies of rare and precious stones peculiar to that neighbourhood, are found deposits of gold, platinum, silver, manganese, copper, coal, iron, rock salt and salt springs, sulphur, gypsum. In the Caucasus, the position of greatest importance was held by the oil-fields. Besides these were found copper, zinc, mineral and salt springs, gold, silver, quicksilver, sulphur. The Central region, round Moscow, Tula, Vladimir, showed deposits of iron ore, coal, phosphorites, gypsum, salt and mineral springs. Round Petrograd iron ores were found. In the Western industrial region (modern Poland) the coal and iron fields of the Dombrova basin occurred, as well as silver ores, quicksilver, and sulphur. In the South were the coal-fields of the Donetz

¹ *Bureau économique russe*, p. 11. (Publication of a private organization of Russian bankers, traders, etc., living abroad. Paris, 1920.) Russia's practical monopoly of platinum and her considerable output of manganese caused a difficult situation to arise on the world market, when her supplies were withdrawn owing to the war. Before the war the world output of platinum was divided as follows: Russia, 94.1 per cent.; British Columbia, 5.3 per cent.; other countries, 0.5 per cent. In 1913 Russia exported 6.2 tons of platinum. As regards manganese, the principal countries of origin produced the following amounts in the period 1911-13: Brazil, 171,000 tons; India, 718,000 tons; Russia, 939,000 tons.

² Brockhaus, *Encyclopædic Dictionary* (R.), Vol. 54, p. 64, "Map of the Mineral Wealth of European Russia."

basin, the iron ores of the Krivoi Rog district, and silver, quicksilver, and copper deposits were also found. The region of salt lakes was found mainly around the estuary of the Volga.

Asiatic Russia showed an equal diversity and wealth of mineral deposits, particularly as regards gold. Deposits of the precious metal were found across the whole extent of Asiatic Russia, as far west as Samarkand, as far east as Vladivostok, and as far north as Gizhiga (near Kamchatka). Silver and copper were also fairly extensively found, particularly south of Akmolinsk, and in the district south-east of Chita. The coal-fields of the Kuznetsky basin, south of the town of Tomsk, had already achieved some reputation, and coal also occurred in the region adjoining Semipalatinsk, and in other parts. Naphtha appeared at the two extremities of Asiatic Russia, in the south-west, near Kokan, and in the east, on the island of Saghalien. Other minerals found were, iron, graphite, salt, manganese, gypsum. The proper exploitation of the mineral wealth of Siberia, as well as of the Urals, depended to a very great extent on the development of transport, and a supply of the necessary labour and capital. In many regions good roads had not even been constructed, so that even the preliminary survey of some mineral beds had not yet been attempted.¹

COAL.

Although the coal-fields of European Russia had shown a remarkable increase in output during the first decade of the twentieth century, the home supply was only able to satisfy approximately 80 per cent. of the demand of the internal market, and recourse still had to be had to import from abroad.² In 1913, 8½ million tons of coal were

¹ As regards gold, *vide The Times Russian Supplement*, 26 April, 1915, p. 5, "Russian Gold Mining," also 28 June, 1915, p. 7, "Development of the Gold Industry." In the latter article the writer discusses the need for a road for vehicular traffic, 325 miles long, which is designed to connect the town of Bodaibo on the Lena goldfields with the Siberian Railway, and thus ease the labour and transport difficulties.

² Appendices A and B for statistics as to the production of coal from the various fields, and the import of coal.

imported, the chief importing countries being Germany and Britain.

The Donetz coal-field was the main source of supply for the home market. Fifty-five per cent. of Russia's total consumption was derived from it, 28.8 per cent. from other coal-fields, 15.7 per cent. from foreign sources.¹ It also supplied 83.5 per cent. of the coke consumed in Russia, the remainder being brought from abroad. It showed a rapid growth in output, from 11 million tons in 1900 to 25 million tons in 1913. The favourable situation of this coal-field, near the Sea of Azov, led to the hope of a development of an export trade in anthracite to the Mediterranean, especially Italy. But the home demand was at the time absorbing the whole of the output, and the development of suitable ports and of a mercantile marine would have been necessary for the success of such a scheme. Of the total capital invested in the coal industry of the Donetz basin, 54 per cent. was found at home, and 46 per cent. was attracted from abroad.

The Dombrova coal-fields of south-west Poland, which were a continuation of the coal-fields of Austria and Prussian Silesia, were also of considerable importance for supplying the local industries with fuel, although the coal they produced was of an inferior quality and yielded no coke. They showed an output of 7 million tons in 1912.

The coal-fields of Tula, Riazan, etc., in the Moscow region were not of very great importance, since the coal they produced was friable, and burned with a considerable proportion of ash. Consequently the local industries preferred to use Donetz fuel, or petroleum from the Caucasus.

Other coal-fields of minor importance in European Russia were those of the Urals and the Caucasus. The coal found in the Urals, near Perm, Ekaterinburg, Cheliabinsk, although not of specially high quality, was quite suitable for ordinary use, and was largely consumed by the local railways. The beds of anthracite known to exist on the eastern slopes of

¹ *The Times Russian Supplement*, 16 February, 1914, p. 7, "The Coal Trade." Also *vide* Appendix C for figures showing the importance of Donetz coal in the general fuel supplies of Russia.

The Russian Economist, Vol. I, No. 1, "Foreign Capital in the Donetz Basin."

the Urals required further railway development before they could be properly exploited. The coal-fields of the Caucasus yielded coal of poor quality, which was unprofitable to exploit owing to the abundance of oil fuel in the neighbourhood.

The position of the Baltic provinces and of the city of Petrograd deserves special note. Their growing industrial importance led to an increased demand from them for fuel. Their distance from the coal-fields of the South, and the heavy cost of railway transport as compared with the cheapness of sea freights from German or English ports, gave a stimulus to the import of foreign coal from these two countries. The transfer to exclusively home supplies would have required Government intervention to institute specially low transport rates for coal from the Donetz basin to the Baltic provinces, or to construct special colliery railways. The completion of the projected Baltic and Black Sea canal, would have had a similar effect in lowering freights and enabling Russian coal to compete in price with the German or English supplies.

The construction of the Great Siberian Railway was a necessary preliminary to the exploitation of the numerous coal-fields of Asiatic Russia. Although they were by no means developed to their full extent before the outbreak of the war, it was calculated that they contained reserves of coal far in advance of the existing demand for mineral fuel in Siberia, so that the industrial future of the country was secured. These coal-fields were: the Sudjensk coal-fields in West Siberia; the Cheremново coal-fields near Irkutsk; the Kuznetsky basin; and the Sutchansk coal-fields in Eastern Siberia. The total output from all these coal-fields amounted to an annual average of 2 million tons in 1914, and the few preceding years.

IRON DEPOSITS.

Although iron mining was carried on in the central industrial region of European Russia, chiefly in the province of Tula, and in Poland, the two districts of greatest importance in this respect were South Russia and the Urals. In

South Russia, the Krivoi Rog district was the centre of iron-mining activities, and contained ore of very high quality.¹ The iron ores of the Urals have long been famous, but require the further development of railways in that region for their satisfactory exploitation.

In Siberia, mines of magnetic iron had been located in the region of the Kuznetsky coal-beds, but not much progress had been made in their exploitation. Further deposits of iron were known to exist near Irkutsk, and in the coast territory, at the bays of St. Olga and St. Vladimir.

PETROLEUM.

Russia's deficiencies as regards coal supplies were partly compensated for by her rich oil-fields, which provided her with an alternative fuel of great value. The first products obtained by the distillation of the crude oil are inflammable, e.g., gasolene, benzene, petrol. The second stage yields the illuminating oil known as kerosene. The heavy residue ("mazut") yields lubricating oils, vaseline, paraffin. It is the final residue left after the extraction of all these products that forms a valuable fuel, which in Russia was widely used in the whole industry of Baku, in the Moscow industrial region, for navigation on the Caspian and the Volga, and on the railways of the Volga valley and the Caspian littoral.

The oil industry, in common with all the other great industries of the country, was largely under State ownership and control, and depended greatly on Government action, assisted by foreign enterprise and capital, for its development. The exploitation of new petroliferous regions, for example, depended largely on the Government's policy of railway building.

Russia's oil supplies entered upon a new era of importance with the invention of the internal-combustion motor, at the beginning of the twentieth century. This invention caused the demand for petroleum to increase so enormously as to make its supply a question of international rivalry

¹ Appendix A, figures as to the output of iron ore in the various producing regions.

among the great nations of the world. With it, came a great extension of the use of petroleum as a source of energy in aviation, railways, commercial shipping, domestic heating, and so on. As the nineteenth century had been a century of coal and the steam engine, so its successor proved itself to be an age of liquid fuel and the internal-combustion motor.¹

During what may be called the "peaceful" period of the development of the petroleum industry, i.e. up to the sudden increase in demand following the invention which so greatly extended the application of liquid fuel, the industry was essentially American. The "Standard Oil Company" had gradually succeeded in obtaining a predominant position in the oil industry of the United States. This monopoly on the home market it finally extended over the world market, a state of affairs which remained unchallenged until the end of the nineteenth century. With the greatly increased significance of petroleum in the realm of industry, there began a period of international rivalry to secure supplies of the precious liquid. A search for new fields was instituted, and the intensive exploitation of existing fields was carried out. England was vitally interested in securing control of petroleum sources abroad: her maritime supremacy, previously based on coal, being threatened by the adoption of oil for fuel. In 1890, the principal English company, the "Shell Transport," joined forces with the Anglo-Dutch group, the "Royal Dutch Shell," the combined concern thereafter making common cause against the "Standard Oil Company." The Anglo-Dutch combine finally established itself in a position of supremacy in the Dutch East Indies, and struck roots in Rumania, Russia, Mexico, and even in the territory of its American rival, in Texas and Oklahoma. Other companies through which English influence was exerted were the "Anglo-Persian Oil," the "British Controlled Oil-fields" (operating in Central and South America), and the "Burmah Oil Company." The immense industrial development of Ger-

¹ Apostol, P., and Michelson, A., *La lutte pour le pétrole et la Russie*, Paris, 1922, Chap. I.

many also demanded increased supplies of petroleum. The latter country, however, did not attempt to operate in the same spheres as England and America, but confined her attention to the adjacent oil-fields of Galicia, Rumania, and Russia. Working through her large Banks, she gradually brought about the fusion of many important Russian and Rumanian oil companies with those of Germany. The culmination of her efforts was reached in the formation of the "Europäische Petroleum Union" in 1906. Thus before the war the entire supply of petroleum to the world market was concentrated in one or other of these three powerful groups, the American, represented by the "Standard Oil Company"; the English, represented by the "Royal Dutch Shell"; and the German, represented by the "Europäische Petroleum Union."

PETROLEUM IN RUSSIA.

Principal Regions.

Although experiments in the distillation of petroleum had been carried out as early as 1823, it was not until the late '50's that serious efforts were made to establish the industry. Works were set up almost simultaneously at both extremes of the Caucasus. The one started on the Kuban by Colonel Novosiltsev did not prove outstandingly successful. Of the 94 wells sunk, only 39 remained in use by the end of the century, and they yielded very little oil.¹ The other, however, established at Baku by Kokorev, proved immediately successful, and soon many other enterprises were started. In fact the four Baku oil-wells of Balakhany, Sabuntchi, Romany and Bibi-Eibat, proved to be so productive that little interest was taken in other possible fields, until the events of 1905-6 showed the danger of concentrating the industry in one geographical spot,² and the exhaustion of the oil-wells themselves showed the necessity of having recourse to fresh supplies. The output declined in the latter years of our period as follows:

¹ Drage, G., *op. cit.*, p. 167.

² Raffalovich, A., *Russia, etc.*, p. 178 *et seq.*

1910	481 million poods.
1911	431 " "
1912	434 " "
1913	407 " "

Further, the output could only be secured by boring to deeper levels, which naturally increased the cost of production considerably. Thus the average depths of borings were, 145.8 sazhen in 1901, 184.7 sazhen in 1912, whilst later, borings of 300-400 sazhen¹ were not uncommon. This decline in the output from the Baku fields stimulated the exploitation of other areas, which seemed to indicate that plentiful reserves of petroleum were available within the country.

Secondary Regions.

Oil was first raised in the Grozny oil-fields in the Northern Caucasus as late as 1896. At first it was under the dominance of the Baku industry, but gradually emancipated itself, thanks to the increasing demand for petroleum on the international market, and the decline of output from the Baku fields. Its rapidity of increase during the latter part of our period may be gauged from the following figures :

Output in 1912	65.4 million poods.
" " 1914	98.4 " "

The Surakhany oil-fields, in close proximity to the old Baku oil region, also gave increasing yields, amounting to 10.4 million poods in 1910, and 51.29 million poods in 1914. This was rapid progress, since oil was first obtained only in 1907-8. Considerable expectations were entertained of the Emba fields, situated in the Urals, the output from which was 100,000 poods in 1911, and 16.6 million poods in 1914. The region being difficult of access had not yet been properly examined, and it was expected that a more thorough survey would reveal even greater reserves of petroleum. The Binagady fields, also close to the Baku region, promised to be an important source of supply. Their yield increased from 3.2 million poods in 1908 to 21.9 million poods in 1914. Other areas definitely recognized as petroliferous, but so far very little exploited, had been located in Turkes-

¹ One sazhen = 7 feet. *Vide* Table of Weights and Measures, p. 2.

tan, and the Transcaspien region, on Syvatoy island in the Caspian Sea, in the extreme north between Archangel and Vologda, and in the extreme east on the island of Saghalien.

Three periods may be distinguished in the development of the industry :

(a) From its beginning up to the year 1905, it was started and developed exclusively at Baku. The supplies of oil from that region were so plentiful that it was not considered worth while to look for other sources. Production increased from an average yearly output of 131 million poods in 1884-5, to 659 million poods in the period 1900-4.¹

(b) The events of 1905-6, however, effected a profound change in the industry. The revolutionary movement was particularly severe in the Caucasus district, and was further complicated by a civil war between the Tartars and the Armenians. Work on the oil-fields was brought to a complete standstill, and almost three-fifths of the territory was ruined. The task of restarting the industry was therefore both expensive and difficult.

(c) The severe drop in production caused by these events was followed by a continued diminution in the output from the Baku oil-wells.² The exploitation of new sources therefore became necessary, but could not be immediately carried out, since confidence had to be restored, and the flow of capital again directed towards the industry. It was only after 1907 that signs of recovery were noted. The new territories round about Baku, the fields of Grozny, Maikop, Emba, began to yield results, but production did not regain its old levels.

The stagnation in the Russian oil industry in the decade preceding the war, has been explained not only by the effect of political disturbances, but by the policy of the Government. Since the greater part of the naphtha-bearing territories belonged to the State, the legislation which

¹ Appendix A. Statistics of production in the various regions.

² Apostol and Michelson, *op. cit.*, Production from the old Baku oil-fields, as a percentage of the total production.

1910	. . .	81.7	1912	. . .	76.2	1914	. . .	62.1
1911	. . .	76	1913	. . .	72.6			

governed concessions on these territories was of the utmost importance.¹ It was held that the regulations issued were not such as to secure the most satisfactory exploitation of the petroliferous areas, but that the State was more concerned with the immediate financial gains to the Treasury than with the ultimate good of the country as a whole. Taxes on petroleum were also very high, which kept the internal consumption low, and reacted unfavourably upon the industry.²

Foreign capital played an important part in the industry from its earliest beginnings. Norwegian capital was the first to enter the field in the '70's of last century,³ followed in the '80's by French capital, which helped considerably to stimulate the Russian export trade in oil.⁴ English capital entered the industry at Baku as early as 1898, but became specially active after 1910, in the new regions of Grozny, Maikop, and Emba. Hence the flow of foreign capital, after a temporary check in the years 1904-9, owing to the distrust aroused by the disturbed political condition of the country, increased greatly, and had reached considerable dimensions at the outbreak of the war. The following are the figures relative to the period 1910-14 :

Year.	Capital entering the Petroleum Industry.	
	Foreign Capital.	Russian Capital.
	Million Roubles.	
1910	7	5
1911	8	1.50
1912	4.20	1.95
1913	54	1.13

Up to the '80's of the nineteenth century, the oil-fields of

¹ *The Times Russian Supplement*, 27 July, 1914, p. 5, "The Oil Industry." For the legal aspect, *vide* Hautpicks, Eugène de, *The Russian Law on the Petroleum Industry*, London, 1911.

² Apostol and Michelson, *op. cit.* In 1910 the price of petrol in ninety-seven Russian towns was 1.69 roubles per pood. Of this amount

35.5 per cent. = excise

32.5 per cent. = expenses of commerce and middlemen

20.0 per cent. = transport, general expenses

11.1 per cent. = actual price of the petroleum.

³ In 1879 the Brothers Nobel founded the "Society of Petroleum Industry."

⁴ In 1883, the "Society of the Caspian and the Black Sea" was founded with French capital.

Russia only produced sufficient to meet the home demand. But after that date, export to foreign markets began, and showed a steady increase up to 1905. Oil became one of Russia's most important assets in the realm of international trade.

The opening of the Transcaucasian railway in 1883 gave petroleum and its products access to the external market by the cheapest and shortest route. The Government lent its assistance by lowering freight charges on that railway, and by encouraging the petroleum industrialists to combine against their American competitors. In the period 1900-4, the export reached 76·8 million poods, of which 45·3 per cent. went to Europe, 35·3 per cent. to the Near East, especially Turkey and Egypt, 15·8 per cent. to India and China, and 3·6 per cent. to other countries. England was the principal market for Russian oil.

The disturbances of 1905-6 caused a decline in output which was reflected in a corresponding decline in export. When Russia was able to export again, she found that she had been definitely superseded in two of her important markets—in that of the Far East by the influence of the Dutch Indies, in British India by the Burmah supplies. Meanwhile world production had increased to such an extent, owing to the discovery of new petroliferous regions, that the supply had far outstripped demand. In the resulting struggle for markets, Russian petroleum found itself practically eliminated from international commerce, except in so far as it was carried on under the ægis of the powerful German group.¹

¹ Appendix B, figures as to the world production of petroleum, 1900-13. The post-war situation is completely changed as a result of (1) the disappearance of Germany as one of the three influential international groups, and (2) by the gradual lessening of the American output, leading the latter country to conserve her existing supplies for domestic use, and even to visualize the possibility of importing petroleum in the future. Hence Russia, with her untapped resources, will probably again become an important factor on the world market. *Vide Bureau économique russe, op. cit.*, p. 9 *et seq.*

CHAPTER XIII.

FISHERIES AND FORESTRY.

FISHERIES.

THE abundant lakes and rivers of Russia, as well as her inland seas, and her coast line, have from time immemorial afforded ample scope to the activities of the fisherman. The different fishing grounds in the country may be distinguished as follows :¹

European Russia.

1. THE CASPIAN REGION, including the river Volga with its tributaries, and the Caspian Sea.
2. THE AZOV REGION, including the Sea of Azov, and the river Don.
3. THE BLACK SEA REGION, including the littoral of the Crimea and the Caucasus, the rivers Dneiper, Dneister, and Danube.
4. THE BALTIC REGION, including the Baltic Sea, the rivers Western Duna, Vistula, Nieman, the Gulfs of Riga, Finland, Bothnia.
5. THE ARCTIC OCEAN AND THE WHITE SEA REGION, including the Murman Coast, the White Sea, the rivers Onega, Northern Duna, and Petchora.

Asiatic Russia.

6. In the Far Eastern possessions of Asiatic Russia, the fisheries of NIKOLAEVSK and WESTERN KAMCHATKA districts were the most important.
7. LAKE AND RIVER FISHERIES are common to both European and Asiatic Russia.

¹ *The Industries of Russia*, op. cit., Chap. XIX, p. 405, "Fish and other Marine Animals." "

In the Caspian region, the catch consisted mainly of herring, white sturgeon, vobla, sander, bream, carp, perch, pike, lamprey, salmon. Of these, herring was the most important, the average annual catch being 10 million poods.¹ The fish products from this region were caviare, glue, cod liver oil, salted, dried, and pickled fish. In the years preceding the war, a change in the character and quality of the fish caught had been noticed, the fish becoming steadily smaller in size. This had been accompanied by a reduction in the actual quantity of fish caught as regards all varieties except white sturgeon and salmon. To prevent a continuance of this undesirable state of affairs, fish-dealers were urging that the catching of young or under-sized fish should be prohibited.

In the Azov Sea region, in addition to the varieties enumerated above, the razor fish and the mackerel were found. The razor fish, however, was becoming increasingly scarce, and was even tending to disappear altogether. A very considerable reduction in the annual catches was noted in this region also.

The Baltic region was chiefly noted for its pilchards. Here no decrease in the catches was noted ; on the contrary the hauls were even found to be increasing, especially those from the Lakes Onega, Ladoga, and Psov.

The Arctic region was remarkable for its shoals of cod, dorse, herring, wolf-fish, sea-perch, flounders, turbot, which migrated from the north of Norway towards the end of March, leaving again at the end of October. In this region, the catches tended on the whole to increase.

The Far East fisheries, particularly those of Nikolaevsk, derived great benefit from the opening of the Great Siberian Railway, which allowed of transport facilities to wider markets. An increasing demand for fish on the part of Japan was also advantageous. The main varieties caught were salmon, sturgeon, carp, trout ; in the estuary of the Amur smelt, dorse, and herring appeared. Fish products were, dried and salted fish, " balyk " (the backs of fish, salted, dried, and smoked), and caviare from salmon.

¹ Raffalovich, A., *Russia, etc.*, p. 217 *et seq.*

The trade in sea animals was insignificant compared with what might have been carried on, and lagged behind that of other countries.¹ The varieties to be found included, in the Arctic Ocean, whales, dolphins, seals, morse; in the Eastern Ocean, the Kamchatka beaver and the sea bear. Very little organization of the industry was attempted, and no statistics are available, except as regards the capture of seals on the various islands on the Bering Sea.²

The central features of Russia's fishing trade during our period were, the decline in the number of fish caught, both absolutely, and relatively to the increasing demand due to the increase of population, and the increase in the amount of fish imported. In 1893, Russia took second place as regards the value of her fisheries, following America, and preceding the United Kingdom. By 1900 Russia had fallen back to the third place, although there were indications that the decline in her fishing industry had been checked in the years immediately preceding the war.³ The rapid increase in the imports of fish into Russia may be gauged from the fact that in 1900 these amounted to 5 million roubles in value, and in 1913 to 25 million roubles. The chief import was herrings, of which Norway supplied 42 per cent., Britain 31 per cent., Holland 18 per cent., and Germany 8 per cent.

The reason for the unsatisfactory condition of the fishing industry was not to be found in the exhaustion of the fishing-grounds, some of which, particularly in the Far East, had as yet been only incompletely exploited. It was

¹ Raffalovich, op. cit., l.c. Number of sea animals captured :

	1903-7.	1908-12.	1913.
	Value in Million Roubles.		
Britain	4.5	4.3	4.9
Germany	4.2	4.0	4.3
Japan	3.8	4.5	5.0
Russia	0.4	0.5	0.5

² For a full description of the industry in this region, vide L. Stejneger, *The Russian Fur-seal Islands*, op. cit. The history of the Russian sealing industry is traced in pp. 88-94.

³ Raffalovich, op. cit., Relative importance of catches.

	1911.	1912.	1913.
	Value in Million Roubles.		
America	150	160	146
Britain	115	124	118
Russia	135	150	168

rather attributed to defects in the organization of the trade, such as unsatisfactory means of communication, and insufficient development of means of preserving the fish.

The most important centres of the fishing trade in Russia were found in the Caspian region. Nizhni-Novgorod was the centre of an important trade, particularly in dried fish. Air-dried fish, principally vobla and sander, were towed up the Volga to Nizhni-Novgorod, where they were sold and largely despatched to the industrial regions in the governments of Yaroslav, Vladimir, Moscow.¹ Tsaritsin was the principal market for the trade in herring and slightly salted fish, the prices for these being fixed there for the whole of Russia. Buyers, principally commission agents, came to it from all parts of the country. Astrakhan was an important centre for trade in all varieties of fish.

The general insufficiency of the transport system of the country² was particularly serious in the case of the fish trade. Since the catches were generally made at certain seasons, and far from the centres of marketing and consumption, methods of preserving and of transport were of paramount importance for the successful development of the industry. The following were some of the methods in use.

(a) *Preserved Fish.*

These generally appeared on the market in three forms : (1) salted, (2) dried in air, (3) dried in stoves. The two latter varieties were mostly prepared in the southern fishing regions of the Black and Caspian Seas and the Sea of Azov, whence they were transported to Nizhni-Novgorod and Tsaritsin to be marketed.

(b) *Fresh Fish.*

(1) TRANSPORTING ON ICE.—This method was used mostly in the export trade, particularly for the despatch of sander by Jewish commission agents from Tsaritsin and Uralsk to Berlin and Vienna. The fish were packed in wooden boxes with handles, or in baskets, with hay at the foot. Layers

¹ *Encyclopædic Dictionary* (R.), Vol. 53, p. 398.

² *Vide* Section 4, "Ways of Communication."

of fish were then laid in these receptacles, alternating with layers of ice, until the box or basket was full. Arrangement had to be made for renewing the supplies of ice *en route*.

(2) TRANSPORTING LIVE FISH IN WATER.—This was done in special boats called "proryezy," in which the fish were towed by steamers. In this way large quantities of live sterlets were transported on the Volga from Astrakhan and Tsaritsin to Nizhni-Novgorod, and even to Petrograd on the Mariinsk canal system. The fish were sold direct from the boats or from special fish-ponds. Where no waterways were available, valuable fish such as sturgeon or sterlet were transported in cistern wagons.

(3) TRANSPORTING OF FROZEN FISH—REFRIGERATING INDUSTRY.—One would imagine that Russia, the historic land of snow and ice, would have developed a very special facility for preserving and transporting fish in this way. But the organization and study of methods in refrigeration was really only beginning, and required to make much progress before it could satisfy the demands of the trade. The first cold store for the application of artificial mechanical refrigeration was built as late as 1898; by 1913, 61 such stores were in existence.¹ Fish which was being transported on ice required to have this ice replenished from railway depots in the course of the journey. These depots were mostly wooden buildings, half sunk in the ground, and covered over with earth. Although 207 such depots had been built by 1913, many more were still required. Refrigerator cars on railways were also required in much greater numbers.

The International Congresses of the Refrigerating Industry, held in Paris in 1908, and in Vienna in 1910, did much to stimulate interest in the subject in Russia, not only with regard to the transport of fish, but that of dairy produce, fruit, poultry, and other perishable goods as well. Courses on refrigeration were instituted at various schools and universities, and other educational activities were undertaken, with a view to training technical experts and engineers

¹ *Review of the Present State of the Refrigerating Industry in Russia*, Petrograd, 1913.

on the subject. The Government lent its assistance, particularly by passing the Law of 21 June, 1910, whereby it was permitted to grant loans from the funds of the State Savings Banks for the purpose of erecting cold stores. But although the theory of the subject thus made considerable advance, it was not possible to overcome the practical difficulties so rapidly. These were, mainly, the insufficient development of the railway net, the bad state of the roads, the immense distances to be covered, the financial difficulties connected with the erection of cold stores and other buildings, the scarcity of ice in warm winters, particularly in South Russia, and the absence of ice-ploughs and other implements for harvesting the ice. If these defects of organization could be overcome, very great progress might be expected in the fishing trade, particularly in the fishing grounds of the Far East which depend so much on improved communications and the development of refrigeration for their proper exploitation and development. Obviously much depended on Government action, since the financial and transport systems of the country were under its control.

FORESTRY.

There is no country more rich than Russia in extent of forest land. The fact, however, that her forest areas are all situated in the northern parts of her possessions, some in tracts that are as yet unexplored, makes their exploitation a matter of much difficulty. Eighty-five per cent. of the forests of Russia were found in the five northern provinces of Archangel, Vologda, Perm, Olonets, Viatka, and in Finland.¹ The central and southern parts of the country were almost entirely denuded of trees, except for the wooded areas of the Caucasus. Asiatic Russia was also very rich in forests, which were distributed throughout the northern sections of the provinces of Tobolsk, Tomsk, Yenisseisk, Irkutsk, Yakutsk, Amur, and the Maritime Provinces.

In the forests of the extreme North coniferous trees, such as varieties of the pine, the fir and the spruce, predominate.

¹ Kovalevsky, M., *La Russie à la fin du 19^e siècle*, Paris, 1900, p. 275 et seq., "Forestry."

Further south, deciduous trees are met with, the commoner varieties being the beech, elm, poplar, ash, birch, plane. The linden, larch, maple, aspen, and oak also occur. In the region of the Caucasus the Caucasian palm and the walnut tree are found. In Siberia, in addition to the varieties already mentioned, there occur such species as the Mongolian oak, the walnut, and the cork tree.

A very considerable proportion of the forest land in Russia belonged to the State. State ownership prevailed over about two-thirds of the forest area of European Russia, and large tracts in other forest districts also belonged to the State: all the Siberian forests were State-owned. Forests in private hands formed about one quarter of the total, and predominated in the districts of the Southern Baltic, the rivers Dneister, Dneiper, Nieman, and in Poland.¹

It was only in the second half of the nineteenth century that timber began to be looked upon as a marketable commodity in Russia, and that the necessity was recognized of drawing up a system of regulations for the protection of the forests as a national asset. Previous to that time, forest areas had been looked upon more as pasture lands, in their clear regions, and as localities for the gathering of honey, firewood, etc.² After the emancipation of the serfs in 1861, landowners who possessed forest lands very often looked to these as the only means of covering their deficits, and therefore began a policy of reckless exploitation which threatened the rapid extermination of the timbered areas in their possession. To combat this tendency, the Government passed the Statutes of 1888. The latter laid it down that certain types of forest land were "preserved," and had to be exploited in accordance with plans laid down by the Government. Such types were, forest land which (a) provided a protection against the formation or spread of dry sand tracts, (b) formed a check to possible landslides, (c) protected springs or sources of rivers. The conversion of forest into arable land was forbidden, as was also the

¹ Appendix A, Statistics as to the extent of forest land, and ownership of same.

² *The Industries of Russia. Agriculture and Forestry*, op. cit., Vol. III, p. 311 et seq.

cutting down of growing timber. Even forests which were not in the "preserved" category were not left altogether without control. Measures were to be taken to prevent wholesale clearance, and all schemes of exploitation had to be approved by local committees for the Protection of Forests.

State-owned forests were administered by the Ministry of Agriculture and State Domains, and the policy adopted was one which aimed more at improving the system of forest regulations for the benefit of the national economy as a whole, than at securing an immediate financial profit to the Treasury. Considerable progress was made on the educational side. The science of forestry was taught in Institutes in the capital cities and elsewhere, and in agricultural colleges and technical schools throughout the country. These efforts were directed to producing a staff of trained forest and field surveyors to carry out the systematic exploitation of the Crown forests. Experiment and research were also being applied to the particular problems which had to be met by forestry experts in Russia. These problems were principally the question of (1) afforestation on the steppes. The benefits of inducing trees to grow on the wide expanses of the steppes were keenly realized, but the difficulties in the way seemed insurmountable. The problem resolved itself mainly into that of choosing and planting the particular trees which could most successfully combat the too luxurious vegetable growth of the steppes. Some degree of success was finally attained after many years of effort. (2) The binding together of shifting sands by planting the sand willow was also a task of considerable magnitude, and of great importance, since by its means tracts which had been simply waste lands, were returned to cultivation. This work was carried out in the Baltic districts, near the towns of Windau and Libau, and also at the mouth of the Dnieper. Projects were being worked out for the execution of similar works in the Caspian Naryn sands, by which it was hoped large areas would become fit for cultivation. (3) The draining of marshes also came within the scope of the forest administration's activities. Much work of this

description had to be done in the governments of Novgorod, Yaroslav, Petersburg, Pskov. The Polessie bogs presented the greatest difficulties: these were contained within a triangle, having its extremities at Brest-Litovsk, Kiev, Mogilev, with the river Pripiat and its tributaries in the centre. Among the works of the Russian novelist Kuprin, the short story "Bolota" (The Marsh) gives a vivid description of the fever-racked and debilitated physical condition which these bogs were responsible for producing among the population of the districts in which they were found. A double benefit was therefore secured by draining them, i.e., the health of the district was immensely improved, and waste areas were converted into pasture and forest lands.

The defects of forest administration in Russia, as was the case in the administration of the Fisheries, were to be found, not in the realm of theoretical advancement, but in that of practical accomplishment. The districts were too large in size and too poorly staffed with watchmen and surveyors, to be properly exploited, and to prevent illicit felling. Not nearly enough had been done to explore the immense tracts of forest land in the northern regions of European Russia, as well as in Siberia, so that large areas had not yet entered into exploitation at all. The question of transport was again of vital importance. Some of the forest regions, particularly in the far North, did not even possess roads, apart from railways, so that exploitation was rendered impossible until these were available.

In spite of these hampering circumstances, Russia's position as a supplier of timber on the world market had been steadily increasing in importance in the years preceding the Great War.¹ In 1913 it was estimated that her contribution to the world supplies amounted to 37 per cent. of the total, and was second in importance only to Canada and America combined.²

Great Britain and Germany were Russia's most important customers for timber, Great Britain taking 35.5 per cent.

¹ Appendix B.

² *Bureau économique russe*, 16 April, 1920, Paris, p. 5. The average export 1904-8 = 5.16 million tons, 1909-13 = 7.66 million tons.

of her total export in 1913, and Germany 32.7 per cent.¹ Of the total timber imported by Britain, 48.4 per cent. came from Russia.² In this respect, however, the importance of Finland must be noted: 45 per cent. of all the timber exported from Russia before the war came from that part of her dominions.³

The distinction between the British and German timber import from Russia is interesting. Germany imported mostly unfinished wood, which was transported mainly on the rivers Nieman and Vistula, and worked up within Germany itself. Germany was anxious to maintain this state of affairs, as was shown by the fact that her customs tariff on finished timber was six times greater than her tariff on raw wood materials. England, on the other hand, took mostly finished wood, which constituted a much more advantageous trade for Russia.

About three-quarters of the total export trade passed through the ports of the Baltic Sea and over the Russo-German frontier. Only about 16 per cent. passed through the White Sea ports, although a great effort was made to stimulate trade through this channel after the outbreak of the war.⁴ The lack of a Russian built and manned mercantile marine was particularly keenly felt in the timber export trade. Complaint was made that timber, after being prepared in Russian sawmills, was shipped to foreign markets in vessels under non-Russian flags. It was pointed out that ship-building works might profitably be established at Archangel, and a Russian mercantile marine built up in the North. Apart from the insufficiency of ways of communication and means of transport, the lack of suitable labour was a serious difficulty in the timber industry in the northern provinces. The lack of technical education, with a corresponding lack of wood experts and specialists, and the

¹ Appendix C, Countries importing Russian timber.

² Appendix D, Timber imports into Britain.

³ *The Forests and Timber Trade of Finland*, V. V. Faas, Petrograd, 1914.

⁴ *The Times Russian Supplement*, 26 April, 1915, p. 8, "Russia's Access to the Sea. The White Sea Outlet." The projected railway line running eastwards from Archangel through the town of Ukhta to the river Ob is discussed. It was destined to tap large timber areas and stimulate timber export through Archangel.

difficulty of obtaining a supply of chemical products, was blamed for the feeble development of other industries connected with lumbering, such as cellulose factories, factories for wood-pulp and paper manufacture.

The defects in the organization of the trade may easily be seen from the discrepancy between the amount of timber marked for export or sale, and the amount actually sent out of the country or otherwise disposed of. As regards the two most important northern provinces of European Russia, these figures were, for the year 1912 :

Governments.	Designated for	Actually
	export. In cubic Sazhens.	exported.
Archangel	1,706,751	526,903
Vologda	731,960	406,443

As regards Siberia, the Government had, in the same year, marked out for sale 4,705,695 cubic sazhen of standing timber, of which only 500,339 cubic sazhen, or 11.12 per cent., was actually disposed of.

It is clear, therefore, that the Government played a very important part in the control and development of the forest riches of Russia, which were among her most valuable national assets. The importance of the Government showed itself not only in its rôle as owner and exploiter of large forest areas, but as regulator of the private-owned tracts as well. In the export trade, the question of transport was paramount, and in this again Government influence was supreme.¹

¹ *Vide* Section 4, "Ways of Communication," Sub-section 2, "The Railway System," p. 167.

APPENDIX.

INDUSTRY.

(a) MANUFACTURING INDUSTRY.

INDUSTRIAL DEVELOPMENT.

TABLE A.

The loss of territory which has resulted from the Revolution of 1917 is bound to have reactions in the industrial sphere, since industry was largely developed within that territory. The following figures make the position clear :—

	No. of Enter- prises.	Per cent.	No. of Opera- tives in 1000's.	Per cent.	Produc- tion in Million Roubles.	Per cent.
In 1912, Russia had, within her present borders, including Siberia and Tur- kestan. . . .	13,775	68·9	1,916·7	82·7	6,059·2	81·4
Within the territory ceded to other States	6,196	31·1	407·7	17·3	1,383·4	18·6
	19,971	100·0	2,324·4	100·0	7,442·6	100·0

Thus it is seen that the ceded territory contained the considerable proportion of one-third of the total number of enterprises, one-sixth of the total number of operatives, and nearly one-fifth of the annual industrial production.¹

¹ Further details to be found in the official Soviet publication *On New Paths, Industry*, pp. 161-3. Issued by the Supreme Council for Labour and Defence, Moscow, 1923 (R.).

TABLE B.

Messenger of Finance, No. 7, 1914, p. 292 (R.), "Large and Small-scale Production in our Wood-working Industry." Statistics are given showing the very considerable predominance of "kustar" over industrial workers in the wood-working industry.

Regions of Russia.	No. of Factory Workers.	No. of "Kustar" Workers.
North	57	2,708
Baltic—North	4,477	22,355
" South	8,481	18,519
Prinyemansky	611	3,021
Privislinsky	8,619	6,797
Dnieper and Dniester	4,920	30,518
Ural iron region	193	14,841
Upper Volga	718	84,460
Middle Volga	1,381	69,393
Lower Volga	1,255	13,410
Interior governments	3,791	103,685
Total	34,503	369,707

The predominance of domestic work is particularly noticeable in the regions of the Upper Volga, and the Interior governments. Both enjoyed the advantages of (1) proximity to the important market of Moscow, and (2) a plentiful supply of timber in the district, and good water routes for the transport of the finished products.

TABLE C.

"Messenger of Finance", No. 26, 1914 (R.), p. 602, "The Strike Movement in 1913."

Number of Strikes.

Year.	No. of Strikes.	No. of Workers Participating.
1907	3,573	740,074
1908	892	176,101
1909	340	64,166
1910	222	46,623
1911	466	105,110
1912	2,032	725,491
1913	2,404	887,096

Regions Affected.

Region.	No. of Estab- lishments.	No. of Strikes in them.	Total Number of Workers.	No. of Strikers among them.
<i>St. Petersburg</i>	2,400	1,089	452,242	530,088
<i>Moscow</i>	2,782	322	771,612	116,877
<i>Warsaw</i>	4,189	561	353,433	111,883
<i>Kiev</i>	3,198	68	264,128	36,776
<i>Volga</i>	1,938	56	156,728	9,660
<i>Kharkov</i>	3,370	308	321,434	81,812
Total	17,877	2,404	2,319,577	887,096

Duration of Strikes.

	No. of Strikes.	No. of Working Days Lost.
Up to $\frac{1}{2}$ day	115	15,937
From $\frac{1}{2}$ to 2 days	1,352	587,246
„ 2 to 5 „	382	332,956
„ 5 to 10 „	252	486,841
„ 10 to 30 „	235	881,527
Over 30 days	68	1,558,774

Branches of Industry affected, and Results of Strikes.

Branches of Industry.	Strikes resulting in			Political Strikes.	Total	
	Success.	Compro- mise.	Defeat.		Strikes.	Workers partici- pating.
<i>Textiles</i> (cotton, wool, flax, hemp, jute, silk)	37	288	141	80	546	229,903
Working up fibrous material	6	17	31	30	84	18,349
Paper manufacture	3	17	33	173	226	31,254
Working up : <i>Wood</i>	11	13	62	80	166	21,050
<i>Metals</i>	31	110	230	583	954	465,645
<i>Minerals</i>	8	17	16	19	60	10,591
<i>Animal products</i>	1	19	35	28	83	15,023
<i>Foodstuffs</i>	9	19	31	22	81	28,244
<i>Chemicals</i>	1	17	28	16	62	44,974
<i>Naphtha</i>	6	116	10	—	132	20,807
<i>Others</i>	1	6	—	3	10	1,256
	114	639	617	1,034	2,404	887,096

Note the predominance of strikes in the textile and metal-working branches of industry.

MANUFACTURES.

1. Sugar.

TABLE A.

Messenger of Finance, No. 9, 1914, p. 409 (R.), "Results of the Sugar-refining carried on in the first three months of the campaign, Sept., Oct., Nov. 1913."

Geographical Distribution of the Industry.

Governments.	No. of Refineries Working.	Governments.	No. of Refineries Working.
<i>South-west :</i>		<i>Western :</i>	
Bessarabia	1	Kholmá	6
Volynya . .	16	Warsaw	18
Kiev . . .	75	Kalish	6
Podolsk . .	52	Kyelets	2
Kherson . .	2	Lonizhin	1
		Lyublin	8
Total	<u>146</u>	Petrovsk	1
<i>Central :</i>		Plotz	7
Kursk . . .	23	Radomsk	3
Poltava . .	12	Syedlets	1
Kharkov . .	29		—
Chernigov .	12	Total	<u>53</u>
Total	<u>76</u>	Total for the Empire .	<u>292</u>
<i>East :</i>			
Voronezh . .	7		
Orlov . . .	3		
Tambov . . .	5		
Tula	2		
Total			

TABLE B.

Messenger of Finance, No. 15, 1914 (R.), p. 67, "The Sugar Industry in Russia in the period 1912-13." Comparative figures as to sugar production in Russia and other countries.

	No. of Refineries.	Area under Beet (in dessiatines).	Yield of Beet per dess (in berkovets).	Amount of Beet worked up (in berkovets).	Yield of Sugar per dess. (in poods).	Yield of white Sugar from beet (in poods).
Russia.	288	685	107	63,900	125.5	74,452
Germany	342	492	203	100,467	296.4	146,061
Austria-Hungary.	201	403	189	76,264	258.7	104,038
France	216	206	195	40,243	256.6	52,874
Belgium	73	59	203	12,163	268.6	16,030
Holland	27	61	201	12,334	271.8	16,634
Italy	37	50	218	10,980	218.1	10,980

TABLE C.

Messenger of Finance, No. 5, 1914 (R.), p. 208, "Import of Russian Sugar into Persia."

Year.	Crystal in Poods.	Lump.
1904-05	544,131	2,891,600
1905-06	247,882	2,888,022
1906-07	521,445	3,309,282
1907-08	560,704	3,310,005
1908-09	541,520	3,164,477
1909-10	451,191	3,072,308
1910-11	703,129	4,177,053
1911-12	898,328	4,451,737

Import of Sugar into Persia by different Countries, as Percentage.

Year.	Russia.	France.	Austria-Hungary.	Germany.	Belgium.	England.	Turkey.	Others.
1901-02	79	13.7	3.1	0.03	0.0	1.60	1.19	1.18
1902-03	82	11.6	4.3	0.39	0.11	0.54	0.40	—
1903-04	81	12.9	0.5	0.29	0.20	0.37	0.0	3.98
1904-05	90	6.3	3.2	0.92	0.40	2.90	„	—
1905-06	77	11.6	4.2	2.31	0.0	0.97	„	3.48
1906-07	77	13.8	2.9	2.02	0.0	0.20	„	3.87
1907-08	82	6.7	0.8	1.94	1.40	4.82	„	2.77
1908-09	83	7.4	1.5	1.39	3.34	1.0	„	1.95
1909-10	81	8.7	1.5	2.37	3.05	0.37	„	3.73
1910-11	78	5.9	2.0	2.42	6.26	0.43	„	3.70
Average	84	9.8	2.4	1.40	1.47	1.27	0.5	—

2. Spirits.

TABLE A.

Messenger of Finance, No. 34, 1914 (R.), p. 248, "State Sale of Spirits in 1913."

Financial Results of the State Spirit Monopoly.

Year.	Gross Income.	Expenditure.	Net Income.
	In Million Roubles.		
1905	612·4	169·2	443·2
1906	696·8	190·4	506·3
1907	708·3	197·8	510·5
1908	708·7	199·4	509·2
1909	720·4	193·3	527·0
1910	764·4	189·9	574·4
1911	782·0	184·4	597·6
1912	823·8	197·5	626·3
1913	892·8	217·6	675·1

TABLE B.

Prof. Simpson, *Some Notes on the State Sale Monopoly and subsequent Prohibition of Vodka in Russia*, p. 31.

Individual Consumption of Alcohol.

Year.	No. of Govern-ments and Provinces.	General Con-sumption (mil-lion vedros).	Individual Consumption (vedros).
1904	71	68·6	0·54
1905	75	74·2	0·56
1906	75	84·5	0·63
1907	75	85·9	0·63
1908	75	85·0	0·61
1909	75	83·3	0·58
1910	75	88·4	0·60
1911	75	90·3	0·60
1912	75	95·1	0·62
1913	75	103·0	0·66

TABLE C.

Messenger of Finance, No. 34, 1914 (R.), p. 248.*Total Amount of Spirits sold, in Regions.*

	1905.	1911.	1912.	1913.
		In 1,000 Vedros.		
North	6,113	7,479	8,117	8,910
East	8,677	9,569	10,238	11,145
Central Indus.	11,185	13,417	14,565	15,950
Central Black Earth.	12,025	14,454	15,303	16,633
Little Russia	4,540	5,475	5,900	6,374
Baltic	1,489	2,007	2,172	2,377
North-west	3,766	4,678	5,103	5,631
South-west	5,856	6,925	7,178	7,739
South	12,495	16,065	15,736	11,320
Western	3,684	5,386	5,626	5,818
European Russia	69,783	85,462	89,942	97,902
W. Siberia	2,986	4,110	4,563	4,749
E. Siberia	2,266	2,077	2,016	2,008
Total for Empire	75,037	91,650	96,522	104,660

3. Cotton.

TABLE A.

Odell, R. M., *Cotton Goods in Russia*. Number of spindles, etc., in cotton industry in Russia.

Year.	Spindles.	Looms.	Cotton Consumed.		
			Russian.	Foreign.	Total.
			In Million Pounds.		
1905	7,350,683	178,506	246	355	602
1906	7,443,854	182,878	311	340	652
1907	7,562,478	188,021	365	337	703
1908	7,807,143	194,402	295	457	753
1909	8,064,707	200,510	388	379	767
1910	8,306,372	213,179	405	391	797
1911	8,448,818	220,000	No statistics.		

TABLE B.

Odell, op. cit., p. 10.

Production of Cotton in 1910, in Districts.

Districts and Governments.	Spindles (1,000's).	Looms (1,000's)	Operatives.	Cotton Consumed.		Production.	
				Russian.	Foreign.	Yarn.	Cloth.
				In 1,000 Pounds.			
<i>Central.</i>							
Moscow .	1,910	48	95,751	122,397	70,822	174,369	132,921
Vladimir .	1,470	65	119,603	86,575	57,724	132,048	187,372
Kostroma .	672	30	53,756	47,786	24,283	63,644	80,267
Tver .	403	10	19,123	22,954	17,745	36,709	32,820
Yaroslav .	375	1	9,860	33,456	10,472	39,082	5,839
Riazan .	202	3	8,890	14,404	6,374	19,063	11,084
Smolensk .	136	1	5,253	11,946	1,191	11,497	5,263
Total .	5,171	162	313,236	339,522	188,614	476,384	455,119
<i>Baltic.</i>							
St. Petersburg .	1,185	10	20,409	22,136	45,219	60,609	30,110
Esthonia .	552	5	11,139	12,295	30,709	39,175	15,505
Livonia .	55	4	2,293	1,429	7,319	7,615	2,054
Total .	1,793	16	33,841	35,861	83,248	107,399	47,670
<i>Western.</i>							
Piotrkov .	1,193	30	46,923	27,420	110,326	135,515	104,892
Warsaw .	62	4	1,329	444	4,032	3,851	921
Kalisz .	19	8	1,367	831	2,052	2,354	2,653
Total .	1,275	32	49,619	28,695	116,411	141,721	108,468
All other districts	65	2	3,223	1,674	3,276	4,302	4,318
Grand total	8,306	213	399,919	405,754	391,550	729,807	615,576

TABLE C.

Odell, op. cit.

Cotton Goods trade : Imports into Russia.

Years.	Yarn.	Cloth.
	Pounds.	
1905	4,554,700	8,953,000
1906	7,906,000	16,425,500
1907	12,543,000	9,422,000
1908	10,072,000	12,272,000
1909	9,260,000	8,683,000

TABLE D.

Odell, op. cit.

Source of Imports in 1909

Countries.	Total Yarn and Cloth (Pounds).	Value in Dollars.
Germany.	4,688,928	5,215,146
England	4,943,930	2,884,255
China.	3,816,098	953,896
Finland	2,524,256	821,346
Austria-Hungary	350,278	272,959
Japan	741,024	249,196
France	299,774	224,254
Switzerland	46,749	85,843
All others	533,531	234,806
Total	17,944,568	10,941,701

TABLE E.

Odell, op. cit., *Exports in 1909.*

Countries.	Total Yarn and Cloth (Pounds).	Value in Dollars.
Persia	10,643,000	6,479,000
China.	5,503,000	2,929,000
Afghanistan	2,552,000	1,597,000
Finland	1,808,000	525,500
Turkey	1,211,000	661,300
Rumania.	88,000	43,600
Germany.	587,000	168,000
All others	163,400	38,600
Total	22,556,000	12,442,000

4. Iron and Metal-Working.

TABLE A.

The Russian Economist, Vol. I, No. 1, p. 132, "Foreign Capital in the Donetz Basin."

Growth in Output of Pig-iron from the Donetz Basin.

Year.	Output in Million Poods. 91
1900	
1905	
1910	. 126·4
1911	. 147·7
1912	. 173·4
1913	. 189·7
1914	. 223·7

TABLE B.

Raffalovich, *Russia*, etc., p. 197.

Output of Iron from the various Producing Regions.

	1904.		1910.		1913.	
	Output of Pig- iron.	Output of Manu- factured Iron.	Pig-iron.	Manufac- tured Iron.	Pig-iron.	Manufac- tured Iron.
South Russia . .	110·6	72·8	126·4	98·9	189·7	141·0
Urals	40·9	29·5	44·9	37·0	55·8	40·8
Moscow region .	5·7	7·4	4·7	8·9	11·8	11·1
Volga region . .	—	9·3	—	8·4	—	10·0
Northern and Bal- tic provinces . .	0·8	12·0	0·1	10·5	0·1	16·4
Poland	22·8	21·6	15·3	20·5	25·6	27·0

(b). EXTRACTIVE INDUSTRY.

1. Mining and Metallurgy.

COAL.

TABLE A.

Raffalovich, *Russia*, etc., p. 173. Output of coal from the various coal-fields.

Year.	Donetz.	Dom- brovo.	Urals.	Moscow Region.	Cauca- sus.	Turkes- tan.	W. Siberia.	E. Siberia.
In Million Poods.								
1895	298.3	224.8	17.6	10.3	1.1	0.5	1.4	1.2
1905	785.3	287.0	30.1	13.1	1.8	2.4	18.9	41.2
1908	1114.9	344.3	45.1	20.0	3.2	2.1	36.4	41.9
1911	1217.6	360.4	42.4	10.9	3.4	6.4	32.4	65.5
1912	1304.6	394.5	57.5	12.9	4.3	6.0	43.2	80.6
1913	1506.9	426.3	73.5	17.1	4.3	8.4	53.6	69.7

TABLE B.

National and State Economy Moscow, 1923 (R.), Chap. II, p. 140, Table No. 1.

In Million Poods.

Kinds of Fuel.	1908.	1909.	Per- centage to 1908.	1910.	Per- centage to 1908.
Coal	1,450	1,460	—	1,470	101
Petroleum . . .	777	792	102	873	112
Imported coal . .	244	241	—	259	106
	2,471	2,493	102	2,602	105

Kinds of Fuel.	In Million Poods.					
	1911	Per-centage to 1908.	1912	Per-centage to 1908.	1913	Per-centage to 1908.
Coal	1,673	115	1,865	128	2,150	149
Petroleum . .	836	107	843	108	846	108
Imported coal .	275	113	365	130	527	216
	2,784	113	3,073	125	3,523	142

Hence in the period 1908-14 :

Increase in coal mined	49 per cent.
„ „ petroleum extracted	8 „
„ „ coal imported	116 „

TABLE C.

The Russian Economist, Vol. I, No. 2, p. 300. "The Past and Present of the Donetz Basin Coalfields," by A. V. Rutchenko. Figures showing the significance of coal supplies from the Donetz basin in the general fuel supplies of Russia :—

Quantities of Fuel obtained in European Russia in 1916.

	Million Poods.
Coal and anthracite from the Donetz basin.	
„ from the Moscow region	42·4
„ „ Ural	92·2
Petroleum	608
Peat	90
Wood fuel	6

IRON.

TABLE A.

National and State Economy (R.), Moscow, 1923, Chap. III, p. 180.

Output of Iron Ore in Million Poods.

Year.	South.	Ural.	Central.	North.	Siberia and Caucasus.	Total.
1885 . .	7.2	40.0	8.5	0.4	0.6	56.7
1895 . .	59.1	74.2	16.5	1.0	1.7	152.5
1905 . .	188.7	82.7	10.0	0.5	0.6	282.5
1910 . .	260.0	73.2	7.8	0.3	0.5	341.9
1913 . .	402.1	104.8	25.1	0.2	0.2	532.4

The increase of output in the Southern region far outstrips the increase in the other producing areas.

PETROLEUM.

TABLE A.

La lutte pour le pétrole et la Russie, P. Apostol and A. Michelson. Paris, 1922. Chap. III, Production from the various regions.

Year.	Four Old Baku Regions.	Wells near Old Baku Fields.	Binagady.	Surakhany.	Statoy Island.
In Million Poods.					
1905	410.0	—	0.3	—	0.4
1906	448	—	0.3	—	0.5
1907	476	—	4.7	0.2	0.2
1908	467	—	5.2	0.3	1.1
1909	490	1	7.4	1.7	1.7
1910	478	3	9.0	10.4	1.4
1911	425	6	7.0	19.7	2.6
1912	419	15	10.0	31.4	3.3
1913	389	19	14.6	39.7	4.7
1914	338	7	21.9	51.3	5.9

	Cheleken.	Maikop.	Emba.	Ferghana.	Grozny.	Total.
1905 .	—	—	—	2.1	43.1	455.9
1906 .	—	—	—	4.3	38.2	491.3
1907 .	—	—	—	3.2	39.4	523.7
1908 .	—	0.1	—	2.8	52.1	528.6
1909 .	3.0	0.6	—	0.9	57.0	563.0
1910 .	9.6	1.3	—	1.7	74.0	588.4
1911 .	13.3	7.8	—	2.0	75.2	558.6
1912 .	13.0	9.2	1.0	2.0	65.4	569.3
1913 .	8.0	4.8	6.0	2.6	73.7	561.3
1914 .	5.0	4.0	16.7	1.8	98.4	550.3

TABLE B.

*National and State Economy, p. 157.**World Production of Petroleum from 1900-13.*

Year.	Russia.	U.S.A.	Mexico.	Rumania.	Holland.	India.	Others.	Total.
				In Million Poods.				
1900	631	496	—	—	—	—	—	1,700.6
1905	455	1,045	2.4	37.5	48.9	100.0	22.5	1,701.3
1908	528	1,392	28.3	70.0	96.9	110.7	38.7	2,264.6
1910	588	1,635	27.1	82.5	99.0	151.3	38.5	2,621.4
1911	558	1,716	114.4	94.2	76.6	156.7	38.0	2,753.9
1912	569	1,731	152.2	109.8	62.0	150.6	35.7	2,808.3
1913	561	2,246	224.1	115.0	54.7	154.7	52.7	3,400.2

Russia's production as percentage of Total.

1900	37.0	1911	20.0
1905	27.0	1912	20.0
1908	23.4	1913	16.4
1910	22.5		

2. Forestry.

TABLE A.

Raffalovich, A., *Russia, etc.*, p. 88 *et seq.*

The total extent of forest land in European Russia, the Caucasus, Asiatic Russia, was estimated at 305 million dessiatines. But this included stretches of tundras, bogs, lakes, rivers; the extent of true forest land amounted to about 170 million dessiatines and was distributed as follows:

Regions.	General Surface.		Net Forest Land.	
	1911.	1912.	1911.	1912.
European Russia	105,809	105,947	85,638	84,249
Do., minus the five northern governments	13,502	13,545	10,804	10,827
The five northern governments	70,675	70,769	58,248	57,835
Kingdom of Poland	612	614	564	561
Caucasus	4,379	4,746	2,962	2,962
Asiatic Russia	228,540	194,409	86,112	91,910

Distribution of Forests in European Russia according to Ownership as Percentage.

Region.	General Forest Surface.	State Forests.	Appanage of Imperial Family.	Private Owners.	Peasant Owners.	Various Others.
Northern district	100	92.8	3.5	1.5	2.1	0.1
N. Baltic . .	100	41.8	6.6	37.8	11.4	2.4
S. Baltic . .	100	—	—	—	—	—
River Niemen .	100	32.5	5.3	60.7	1.1	0.4
Rivers Dnieper and Dniester .	100	16.0	0.8	73.0	6.3	3.9
Poland . . .	100	33.19	0.01	51.16	9.7	5.5
Ural district .	100	48.1	0.8	31.4	14.7	5.9
Upper Volga .	100	45.8	4.9	38.1	9.6	1.9
Middle Volga .	100	47.7	6.0	32.8	12.6	0.9
Lower Volga .	100	20.2	25.0	31.5	20.9	2.4
Central provinces	100	24.3	1.2	53.0	18.3	3.2

294 THE ECONOMIC DEVELOPMENT OF RUSSIA

TABLE B.

*Bureau Economique russe, 16 April, 1920, Paris, p. 6.**Russia's Exports of Timber, 1904-13, in Million Roubles.*

1904	15.2	1909	120.0
1905	76.9	1910	138.2
1906	98.2	1911	142.4
1907	107.8	1912	153.4
1908	111.2	1913	164.9

TABLE C.

Russia's Export Trade in Timber, and the Importance of the Forests of North European Russia, V. V. Faas, Youraveta Home and Foreign Trade Co., Inc. N.Y., 1918.

Countries importing Russian Timber in 1913.

	Quantity in Tons (1,000's).	Percentage of Total Quantity.	Value (in 1,000 Dollars).	Percentage of Total Value.
Britain	2,973	35.5	35,458	40.6
Germany	2,723	32.7	21,766	25.6
Holland	1,358	16.3	13,413	15.8
France	415	5.0	5,438	6.4
Belgium	331	4.0	3,867	4.6
Others	549	6.5	5,997	7.0
Total	8,349	100	84,939	100

TABLE D.

Faas, op. cit., Countries exporting Timber to Britain.

	Percentage of Total Quantity.	Percentage of Total Value.
Russia with Finland	48.4	45.4
Sweden	16.3	15.3
Norway	3.9	4.7
America	7.0	13.8
Canada	8.9	12.3
Other countries	15.5	8.5
	100	100

CHAPTER XIV.

CONCLUSION.

It will be useful to summarize the main indications of the predominant influence of the State in each department of economic activity, as these have appeared in the material collected in the preceding chapters : and to see the elements of conflict which this influence involved.

The fundamental purpose of trade is to satisfy human wants. This holds good in internal exchange, and even more so in external exchange, where a country derives the benefit of obtaining from other countries what she cannot produce herself. This fundamental fact was not, however, made the basis of Russia's foreign trade. It was directed and controlled by the Government, whose essential need was to secure a favourable "balance of trade," and so maintain the financial stability of the country. To this end, the interests of the home market were sacrificed. Export was encouraged by the tariff policy, manipulation of railway rates, and other artificial measures. Hence Russia's "favourable balance" was only secured at the expense of the population, who were forced to limit their consumption, even as regards necessities. It was therefore not possible to develop the home market, which depended upon increased power of consumption among the masses of the people, and this in turn reacted unfavourably upon the development of industry.

The study of the financial system of Russia, in its various aspects of Banking, Currency, National Debt, and Taxation, has shown how very far-reaching and complete was State control over this aspect of the economic life of the country.

The State itself was the chief banker and money-lender, besides directing the general financial policy of the country,

and it exercised considerable control even over such banking institutions as were not directly under its own management. The elements of instability in this position were apparent in various directions. The State Bank, for example, found itself in an anomalous position through having to fulfil the double function of being at once a Department of State, and an independent banking concern. The Land Banks did not succeed in solving the agrarian problem in its two-fold aspect, as connected with, (a) the impoverishment of the landed gentry, and (b) the "land-hunger" of the peasantry. As a result, forces which might otherwise have become reconciling factors in the antagonism between rulers and ruled, had no opportunity of developing. No strong class of propertied agrarians grew up to form a united party in politics or in public life. The continued unsatisfactory condition of the peasantry encouraged a negative attitude towards private property, and gave full scope to schemes of reform on a distributive basis, which were finding increasing favour in Socialist circles, and which found practical expression in 1917. Joint Stock Banks were connected with industrial capital, which was largely foreign, and more immediately concerned with profit-making than with the fundamental interests of the country. Such capital was consequently regarded as an alien factor, banking became identified with it, and was in turn held to be inimical to the true interests of the country.

The establishment of the gold standard of currency was deliberately carried out by the Government, since it realized that an unstable currency had unfavourable reactions upon foreign trade, and the whole economic life of the country. In the opinion of many it remained doubtful whether the advantages secured by the establishment of the gold standard outweighed the strain imposed upon the country by the necessity of attracting gold from abroad.

The Government policy of "Europeanization" involved heavy borrowing from abroad, since the home money market could not provide sufficient funds to carry out these schemes. This imposed a considerable burden upon the nation, and also involved a large element of foreign control in industry,

which was resented by the growing nationalist sentiment among the people.¹

The extreme poverty and low intellectual level of the peasantry remained a serious problem in the realm of revenue-raising. The existing system of taxation was condemned, but it was difficult to institute changes, and yet ensure that sufficient revenue would be forthcoming for the needs of the State. Any degree of taxation would have been felt as heavy by the peasant, in view of his poverty, and direct taxes would have been very difficult to collect.

All the foregoing difficulties arose mainly from the fact that a modern system of finance was being grafted on to a country at a backward stage of economic development. Difficulties and strain were inevitable, until the necessary adjustments had been carried out.

Transport is perhaps the aspect of the economic activities of Russia that illustrates most clearly the predominant influence of the State as an organizing and creative factor. The Government realized that an adequate railway net was essential, both for strategic purposes, and for the general development of the country, particularly in connection with the growth of trade and industry. Russia herself could not supply the necessary capital, therefore it became necessary for the Government to intervene, give its guarantee to attract capital from abroad, and undertake the actual work of construction and administration. The result of its activities was a railway net which was at one and the same time inadequate for the needs of the country, and far in advance of what the country could economically support. There could be no doubt as to the crying need for extended facilities in transport. The fishing trade, the export trade in timber and corn, the development of industry and of mining, all depended on the building of more railways.

¹ This part of the policy of the Tsarist Government has yielded the most thorny problem which exists between its successor, the Soviet Government, and the other Powers of Europe, viz., the question as to whether the Soviet Government is legally or morally bound to recognize this Debt, which, it holds, was incurred without the consent of the Russian people as a whole.

At the same time, the railway system, having been built with a view to developing the country, rather than satisfying an already existing need, was not a paying proposition, and represented a serious burden upon the national resources. It is an essential task of any Government to forecast future development, and to provide for the future needs of a country. The difficulty, however, lies in tiding over the transition period, in which the strain of providing for the future is felt, and the fruits of the policy are not yet evident.

Industry was in its origin a creation of the State, and during its entire development it continued to be under the direct tutelage of the Government. Only the textile industries, and to some extent the sugar-refining industries, started as a matter of private enterprise, and developed more or less independently of State control. Industrial development was an essential part of the State policy of rendering Russia self-sufficing, and bringing her up to the economic level of the other great Powers of Europe. But social development did not keep pace with industrial development. The growth of a middle class was not sufficiently rapid to ensure the complete assimilation of industry into the economic structure of the country: industry remained more or less an alien growth, imposed from above. In some cases it was held that industrial development was fostered at the expense of the population in general. In the case of cotton, for example, as well as sugar, and the products of metallurgical industry, the home market had to pay very high prices for goods which could have been obtained at cheaper rates from abroad. Hence these industries were really subsidized at the expense of the people in general, who were accordingly inclined to view industry as a burden, and not in any way beneficial to themselves.

From the point of view of the workers also, industry remained an alien matter. They continued to be predominantly peasant in outlook, their plot of ground remained the essential matter, not the factory or workshop, which appeared to them to exist for the benefit of the employer alone. Only a small group of trained workers, whose divorce

from the soil had become complete, developed a real interest in industry, but they were far too few in number to influence the whole.

The study of Russia's economic development during the period 1905-14 leaves no doubt as to the central fact of the predominant activity of the State in every sphere of economic life, not only as an administrator, but as an actual undertaker of the various processes involved. The disadvantages attached to this state of affairs were numerous. It laid a very considerable strain upon the Government, which would have found the task of administration alone sufficiently complicated in such an immense Empire. When to the task of administration the actual details of execution were added, the task became almost superhuman, particularly as the Government was not supported by an independent and efficient Civil Service, or by any strong, well-organized body of public opinion. Again, there was the constant danger that Government action would outrun the stage to which the sentiment of the people had attained, and would therefore lack any secure basis. The Government was twentieth century in its economic aspirations: but these aspirations had to be grafted on to a political structure which approximated more nearly to the sixteenth century, and to a people at an equally backward stage of development.

As a result, the State found itself constantly "speculating in futures" in its economic policy. In view of Russia's almost unlimited natural wealth, there was no doubt that ultimately the railway net would pay, that ultimately the industries which were so costly to establish would yield handsome profits. But the process demanded a long period of peaceful development. Russia seemed to have entered upon such a period, after the disturbances of the Russo-Japanese War and the 1905 Revolution had been overcome. And from that time up to 1914 progress was steady and remarkable in every sphere of economic activity. But the outbreak of the war cut short this progress before the synthesis between a modern economic system and a backward social and political structure was anywhere near completion.

In the political sphere as well, the period 1905-14 seemed

to promise a gradual synthesis between the aspirations towards democratic government on the part of the intellectual classes, and the autocratic form of established government. Indications of the gradual bridging of the gulf between the autocratic rulers and their subjects were seen in : the transition to a representative form of government by the establishment of the Duma ; the transition of the peasantry from the communal to the individual system of landholding, presaging the growth of improved methods of agriculture, improved conditions among the peasantry, and the growth of a more intelligent public opinion ; and an increasing tendency for greater scope to be allowed to private initiative in both the economic and the political spheres of action. But this tendency also required considerably more time for its development than it had obtained before the outbreak of the war.

An appreciation of the Soviet Government does not come within the scope of this work ; and it is almost impossible to attain to an unbiassed appreciation, in view of the fact that the events involved are of comparatively recent date, and are surrounded by a welter of controversy. As regards economic policy, however, there can be no doubt that the Soviet Government has gone even further than its predecessor in the matter of State control, even when the modifications of the rigid system of integral communism, introduced by the inauguration of the " new economic policy " in 1921, have been taken into account. Foreign trade, finance, transport, industry are all under the direct control of the State, to an even greater degree than was the case under the Tsarist régime. It seems probable, therefore, that the Soviet Government will have to face embarrassments created by this position, similar to those experienced by the previous ruling authorities. It will, however, only be possible to decide whether the new system is in greater harmony with fundamental social development than was the old, when Russia has recovered from the economic disorganization inevitably entailed by the upheavals of 1917, and when time has softened the bitterness of faction which at present divides the adherents of the two régimes.

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INDEX

- Agriculture, 6, 9, 46, 47, 53, 55-60
92-3, 96-7, 219, 244
- Banking :
State Bank, 82
Functions of, 83
Connection with State, 83, 84, 296
Activities of, 83-5
Criticisms of, 86-8
Savings Banks—
Functions of, 88
Activities of, 88, 150, 151, 152
Insurance operations, 89, 152, 153
Urban nature, 89, 152, 153
Small deposits in, 90
Investment of resources, 91, 154
Social significance, 92, 154-7
Land Banks :
Nobles' Land Bank—
Need for, 94
Functions of, 95-6
Connection with State policy, 96
Criticisms of, 96-7, 296
Peasants' Land Bank—
Functions of, 98
Activities of, 56, 99, 157, 158
Social significance, 99, 159, 296
Criticisms of, 100-1
Municipal Banks, 101
Functions of, 102
Joint Stock Commercial Banks, 102
Connection with industry, 103, 160
Black Soil, 8, 9, 13, 29
Bolshevist Party, 20, 21
Budget, 26, 246, 248
Revenue—
Statistics of, 125
Sources of, 126-30
Expenditure—
Statistics of, 131
- Budget Expenditure (*continued*)—
Extraordinary Expenditure, 132
Free Balance, 132-6
- Canals, 177-8, 260
Capitalism, 17-19, 87-8, 229, 230
Coal :
Producing regions, 55, 258-60, 290
Statistics on, 289
Projected export of, 179, 259
Colonial Expansion, 7, 12
Combinations, industrial :
Nature of, 237
Development of, 238-40
Constitutional Reform :
Preceding events, 21-2
The Manifesto, 22-4
The Duma, 24-8, 35, 36, 131, 235
Cotton :
Development of industry, 226, 249, 285
Machinery, 249
Manufacturing districts, 250, 286
Earnings of operatives, 251
Size of mills, 251
Supplies of raw material, 183, 252-3, 286, 287
Imports and exports of, 61, 253-4, 287
Council of the Empire, 27
- Direct Action :
Doctrine of, 20
- Emancipation of the serfs, 16, 17, 56, 221, 274
Employing classes :
Types, 223
Foreign element, 17, 220, 223-4, 249-50
Exports :
General, 59, 72, 75
Grain, 55, 73, 111
System of marketing, 57

Exports (*continued*)—

- Grain, Elevators, 58, 86
- Export by frontier, 50, 74

Factories :

- Development, 219, 251, 279
- Types, 220-1
- Workers in :
 - Characteristics, 225, 298-9
 - Economic position, 225-6
- Inspectors of, 232

Fisheries :

- Fishing grounds, 268-70
- Features of the trade, 270-1
- Centres of the trade, 271
- Methods of transport, 271-2
- Refrigerating industry, 272-3

Foreign Trade, 177, 179, 186

- Theories of, 39

Forestry :

- Areas, 8, 273, 293
- State regulation of, 96, 274-6
- Timber export, 276-8, 294

Geographical features :

- Climate, 6
- Contour, 6
- Zones of vegetation, 7-9

Gold reserve, 110, 162**Gold standard, 47, 107-10, 296****Imports :**

- Increase in, 61, 75, 76
- Classes of, 62
- German supremacy, 63-5, 77

Industrial legislation :

- Hours of work, 231
- Contract of hiring, 231
- Factory Inspectors, 232
- Workmen's Compensation, 232
- Health Insurance, 233
- Accident Insurance, 234

Industry :

- Development of, 87, 219-20
- "Intelligentsia," 17, 21

Iron :

- Exports of, 60
- Syndicates, 238
- Manufacturing districts, 254-5
- Growth of industry, 255-6, 288
- Home demand, 256
- Deposits of, 260-1, 291

"Kustar" industry, 226-30, 280

- Branches of, 227
- Earnings in, 227
- Theoretical controversies on, 227-30

Labour movement :

- Government control, 234
- Trade unionism, 235-6
- Strikes, 236, 280, 281

Land Commune, 18, 19**"Land-hunger," 56, 57, 87, 99, 101, 296****Land Redemption Annuities :**

- Cancellation of, 101, 138-9

Lenin, 21, 229, 230**Localization of Industry, 222****Manufactures :**

- Exports of, 60
- Imports of, 61
- General survey, 241-2

Marxians, 18-21, 228-30**Menshevik Party, 20****Mining :**

- General survey, 257-8
- "Mir," 18, 19

Monetary Circulation, 113-14, 163**Monetary Reform, 105-10**

- Criticisms of, 110-12
- Disturbances in, 1904-6, 112-13

Municipal Finance :

- Sources of income, 144-5, 170
- Indebtedness, 145, 170

Narodniks, *see* Populists**National Debt :**

- Origin of, 114-16
- Growth, 112, 116-18
- International comparison, 119
- Composition of, 119
- Foreign element in, 40, 104, 112, 121-4, 135, 164-7, 223, 296

Nationalistic Policy, 96, 224**Orthodox Church, 13, 186****Outlet to the sea, 7, 39, 186, 277****Pastoral Tribes, 8, 11, 13****Persia :**

- Exports to, 244, 253

Petroleum :

- Syndicate, 238
- International development, 261-3, 292
- Russia : producing regions, 263-6, 291, 292
- Foreign capital, 266
- Export of, 267

Population :

- Statistics of, 9, 30, 31
- Racial divisions, 10-13, 30, 116
- Religions, 12, 31
- Distribution of, 13, 32
- Occupations, 13, 32, 33, 101

- Populists, 17-18, 228-30
 Proletariat, 16, 19-21, 225, 228
 Railway system :
 Aims of, 182-3
 Development before 1905, 183-5,
 207
 "Concession" system, 183
 Strategic considerations, 184,
 192, 199
 Trans-Siberian Railway, 12,
 176, 185-7, 254, 260
 Development after 1905, 187-9
 Traffic, 189, 210
 Tariffs, 111, 190-1, 211
 Warehousing system, 192
 Finance :
 Before 1908, 193-8, 213
 After 1908, 198-200, 211, 212
 International comparison, 200,
 214, 215
 Insufficiency of, 4, 200, 271,
 276-8, 297-8
 Transcaucasian Railway, 267
 Orenburg-Tashkent Railway, 183,
 196, 252
 Rivers, 175, 182, 200, 203, 204
 Defects of, 176
 Roads, 200
 Significance of, 173
 Systems of construction, 174, 202,
 203
 Russo-Japanese War, 22, 106, 119,
 131, 132, 135, 138, 183, 188,
 248, 299
 Shipping :
 Shipbuilding, 179, 205, 277
 Mercantile Marine, 180, 206, 277
 Siberia :
 Geographical features, 7-8
 Population, 13
 Exports from :
 Grain, 48, 59, 183
 Dairy produce, 59, 186
 Migration to, 13, 93, 186
 Waterways, 176-7
 Minerals, 258, 260
 Fisheries, 269
 Forests, 273, 278
 Social classes, 16-17
 Social Democratic Party, 20-1
 Spirits, 129
 Systems of control, 245-6
 State monopoly, 246-8, 284
 Growth of intemperance, 129,
 248, 284, 285
 Struve, Peter, 20
 Sugar :
 "Normirovka," 238, 242
 Industry, Government regulation
 of, 242, 298
 Brussels Convention, 243
 Refineries, 243, 282
 International comparison, 243,
 283
 Exports of, 244, 283
 Tariff :
 Policy, 49-51, 111
 Customs duties, 41, 51, 70, 71
 Russo-German Treaties, 51-4
 Taxation :
 Direct, 126-7
 Indirect, 127-30
 Criticisms of system, 136-7, 297
 Projected reforms, 137
 Theories :
 Importance of, 15-16, 39-40
 Tobacco :
 Taxation on, 127
 Trust, 239
 Trade Balance :
 Statistical methods—
 Customs prices, 41
 Declarations, 42-4
 Corn export, 44-8, 68, 69
 Economic significance of, 40, 45,
 61, 97, 111, 295
 Wheat surplus, 9, 48, 55-60, 98
 Witte, Count, 23, 45, 51, 86, 106,
 135, 174, 185, 246
 Zemstvo, 21, 57, 174, 233
 Description of, 139
 Grants in aid, 141
 Relations with Government,
 140-1, 168
 Expenditure, 142-4, 169
 Rates, 169

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